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BARNARD AND DENNIS

Where separate ways have led

THE ENIGMA OF SENNA

Is it still Win or Bust?

CARRYING THE LOAD

Has it been a Goodyear?

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Main cover picture: LAT
Inset of Ron Dennis:
Allsport/Pascal Rondeau

The sports car with greatness thrust upon it.



Showered with praise, heaped with plaudits, the motoring press welcome the new 300ZX. . . .
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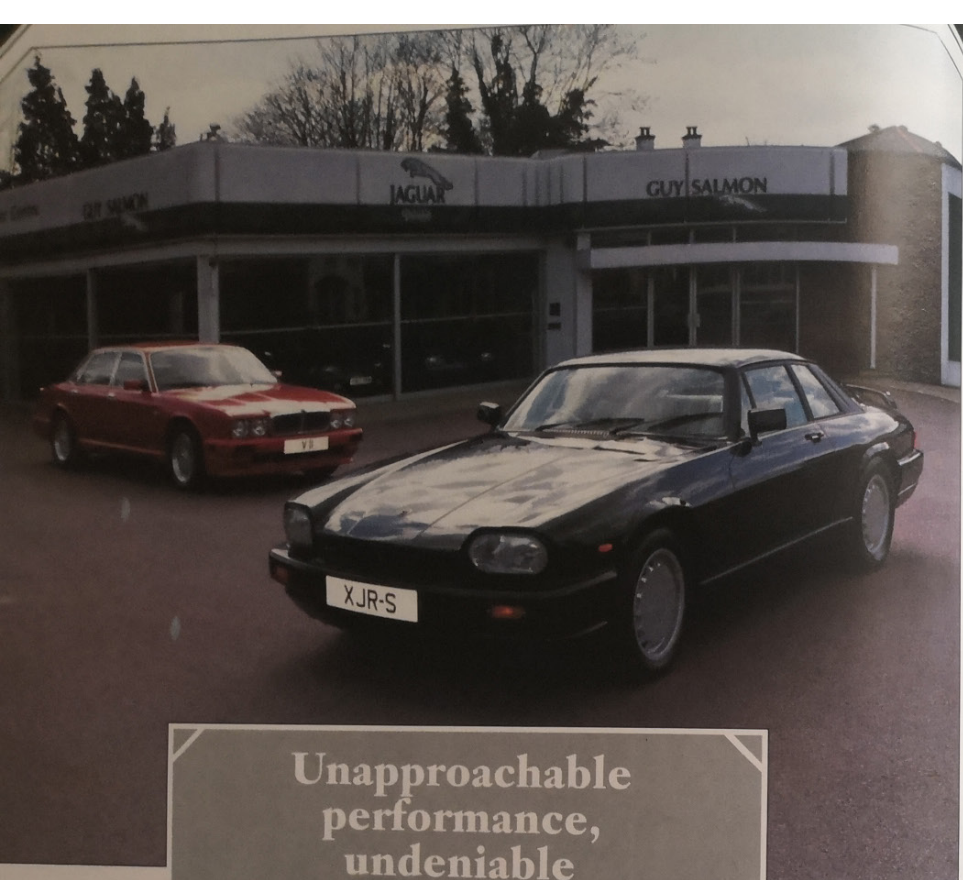
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POLE POSITION

The Editor's Page



Spring is in the air: okay, not over there in Europe, but down here in Australia where this page is dragged from the editorial brain. Adelaide, emerging from winter gloom, greeted David Brabham at the media launch for this year's Foster's Australian Grand Prix, and looks forward now to a carnival of racing and peripheral activity worthy of the 500th race in World Championship history.

In the northern hemisphere, though, the approach of autumn seems to be casting a chill over certain aspects of the Formula 1 scene. Monteverdi are out in the cold, at least for the remainder of this season; relations between certain drivers seem distinctly cool; and the warmth of Nigel Mansell's 1990 attitude has all but disappeared as Prost accelerates towards a possible fourth world title and secure status at Maranello next year.

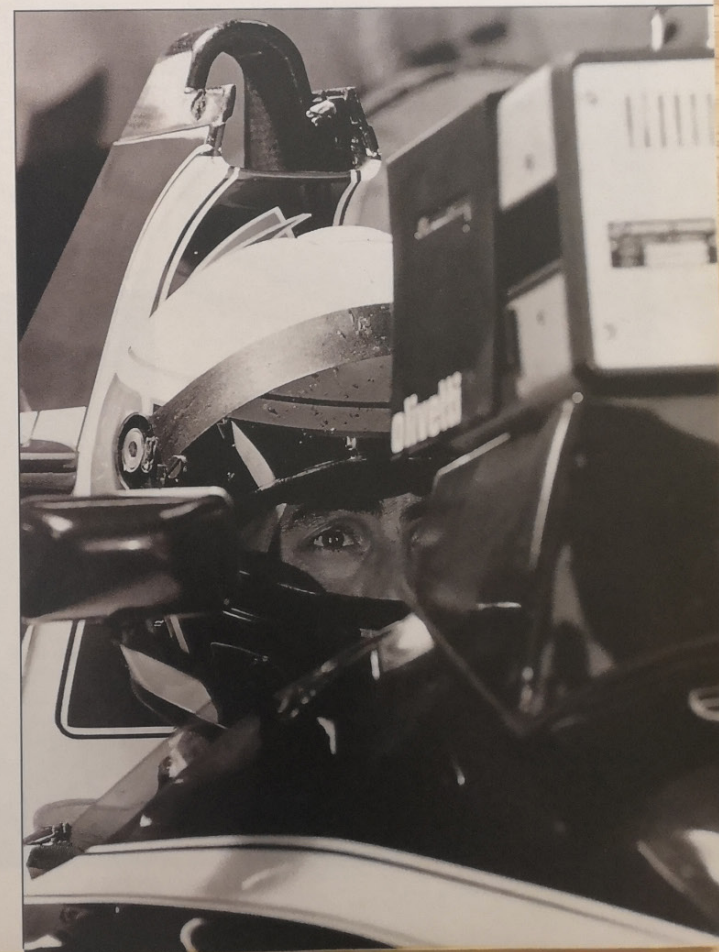
"Season of mists and mellow fruitfulness", the poet said of autumn: out of the haze at Spa came the certainty that Senna is more determined than ever to regain a crown he feels he was cheated of, and there can have been few acts more fruitful in recent years than his signing of a new, one-year contract with McLaren whose bottom line is reputed to have more noughts than most people see in a lifetime of endeavour.

Since spring, it seems, the saga of who goes where, when and - especially - for how much has snowballed to the extent of taking precedence over what goes on out there on the track. Furtive visits to motor-homes, last-minute denials, deathbed retractions: all are now part and parcel of a supposedly private, professional activity carried out increasingly in the full glare of public speculation. Who cares how much these guys earn, anyway? They lay their lives on the line as no other sportsmen do, and in a society governed by the law of supply and de-

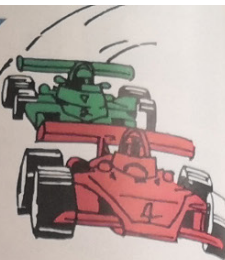
mand they are entitled to stretch that law to breaking-point in the pursuit of their own self-interest.

In the last analysis, however, the rest of us are only concerned with on-track exploits, not behind-the-scenes exploitation of a bizarre and, these days, bewildering market. Five races to go at time of writing, with Prost adamant that a 10-point gap coming

out of Monza would be bridgeable in the remaining races. We in Adelaide are hoping that the 500th race will be further enhanced by being, once again, a Championship decider: let's hope the rest can close the gap to Senna and McLaren, and that from a fruitful autumn's racing there will be no need for another winter of discontent.



KEEPING TRACK



August 1, London: Speculation mounts that R.J. Reynolds Tobacco International, makers of Camel cigarettes, are set to end their relationship as sponsors of Team Lotus. Benetton are tipped to be the team to benefit in 1991.

BP opens its doors to a group of journalists for a private tour of its research and development facility and denies claims that F1 fuels are dangerous.

At Silverstone, work begins on major alterations to the British Grand Prix circuit.

August 2, Guildford: A Benetton spokesman confirms to *PE* that both of the team's drivers are poised to re-sign for 1991, thus confirming the rumour that the team are to gain Camel backing.

August 3, London: Press reports suggest that the list of drivers being considered for Ferrari's replacement for the soon-to-retire Nigel Mansell include Stefano Modena, Jean Alesi, Ivan Capelli and Riccardo Patrese. Capelli is regarded as favourite.

The Brabham team finds its Chessington headquarters are equipped with new locks and firmly closed. The new locks were reportedly fitted by a representative of former team owner Bernie Ecclestone who still owns the premises. A misunderstanding over payments of leasehold instalments was said to explain the problems. Dennis Nursey, the Managing Director of Middlebridge Engineering which purchased the team earlier this year, said the

team was "definitely not for sale".

Ettore Maserati, the last link with the foundation of the great Italian marque, dies at 96 in his native Bologna.

August 4, Norwich: Former Benetton team manager Peter Collins is said to be poised to make a return to Formula One with Lotus. He and Peter Wright, both ex-Lotus employees from the days of Colin Chapman, are linked with several stories suggesting they will take over the management of the team.

August 6, Norwich: Lotus announces that Johnny Herbert, the former Benetton driver who is Lotus's official reserve and test driver, is to drive for the team for the first time since January at the Monza tests later in August.

August 7, Woking: Ken Tyrrell says he believes his team has a real chance of winning points at the Hungarian Grand Prix and predicts Jean Alesi will qualify fourth or fifth.

August 9, London: Nigel Mansell will change his mind about retiring from Formula One at the end of the season if, as is increasingly plausible, McLaren offer him a drive for 1991, the *Guardian* reports. In a speculative article, the newspaper suggests Ayrton Senna is negotiating with Williams for 1991 and that Mansell will take his place next year, thus performing a rapid u-turn on his retirement announcement at Silverstone in July. McLaren managing director Ron Dennis tells a

Marlboro press conference in Budapest that he has not spoken to Mansell or any other driver.

Leyton House team manager Ian Phillips returns to Formula One after five months away on sick leave. He is spotted happily flying out to Hungary.

August 10, Budapest: Mansell denies he is thinking about coming out of retirement. "Nothing has changed since Silverstone," he tells reporters after the morning free session at the Hungaroring. Another report, in the *European*, says Mansell is likely to take a one-year sabbatical and then return.

R.J. Reynolds announce they are to sponsor Benetton in 1991 and 1992

and will become associate sponsors of the Williams team. The Camel sponsorship of Lotus is to end. Scuderia Italia announce an exclusive deal for the supply of Judd V10 engines next year. Lotus announce the appointments of Peter Collins and Peter Wright as marketing consultants with immediate effect. Bernie Ecclestone announces a new five-year deal for the Hungarian Grand Prix, starting in 1991. Gerhard Berger takes the overnight pole for McLaren.

August 11, Budapest: Gianni Agnelli visits the Grand Prix paddock for a behind-closed-doors session in the Ferrari motor home. Thierry Boutsen takes pole position in his Williams with Riccardo Patrese alongside.

August 12, Budapest: Boutsen wins the Hungarian Grand Prix amid controversy over the two McLaren drivers. Senna collides with Alessandro Nannini's Benetton and inherits second place, Berger does the same to Mansell's Ferrari at the same corner and both are forced to retire.

Gregor Fotek confirms he has walked out on the Monteverdi team.

August 15, London: Ecclestone suggests a basic salary of \$1 million for GP drivers, *Autocar* reports. The basic salary can be topped up from a bonus on cash for points.

August 16, London: Ecclestone confirms that there will be 16 races in the 1991 World Championship, according to reports. He said Mexico remains the only doubtful race for next year but said it was being worked on. It is also reported that South Africa, Singapore and the Soviet Union are keen to host Grands Prix.

August 17, Monza: Johnny Herbert regains some of the F1 limelight, however, briefly, with an impressive show of test driving for Lotus. The former Benetton pilot is 10th quickest overall and shows much of the promise which first earned him attention two years ago before his bad accident at Brands Hatch. Ayrton Senna is quickest overall in the testing with a time of 1.24.74 ahead of Nigel Mansell, Alain Prost and Jean Alesi.

August 18, Maranello: Ferrari refute claims that they have signed Ivan Capelli as a replacement in 1991 for Nigel Mansell. Capelli is widely believed to be the top contender on a short list which also includes Riccardo Patrese, Jean Alesi and Stefano Modena. At the other end

of the 'pit lane', rumours abound that Monteverdi are in serious trouble and on the point of quitting F1. The team is said to have financial problems and no technical staff.

August 19, Brussels: Belgian Eric van de Poele is approached by Monteverdi to drive for them in the Belgian GP at Spa, a circuit he knows well. It offers him a chance of attempting to qualify for his first GP.

August 22, Spa: Monteverdi are officially announced as having withdrawn from the Belgian Grand Prix and the rest of the World Championship. The team has financial problems and has been unable to pay its Goodyear tyres bill.

August 23, Spa: Alain Prost agrees to remain with Ferrari in 1991, according to a press release issued by the team on the eve of the Belgian GP. This news raises further speculation over the future of Nigel Mansell, Ayrton Senna and Jean Alesi.

August 24, Spa: Gerhard Berger claims provisional pole position in opening qualifying for the Belgian GP. Senna is said to be poised to sign for the Canon Williams team.

Prost: happy for 1991, unsure who will be Fiorio's second choice

August 25, Spa: Contrary to all predictions, it is announced that Senna has actually agreed to continue driving for the Honda Marlboro McLaren team in 1991. The team issues a statement but no details. Senna later claims pole position for the Belgian Grand Prix.

August 26, Spa: Senna wins the Belgian Grand Prix to open up a 13-point lead in the Drivers' Championship after a race marred by accidents and requiring three starts. Alain Prost is second for Ferrari, but his team mate Mansell retires after only 19 laps saying his car - Prost's spare - is "undriveable and dangerous".

August 28, Maranello: Ferrari are reported to be examining in detail the car Mansell drove at Spa and considering whether or not to take disciplinary action against the driver.

August 29, Maranello: A spokesman for Ferrari says it is "all love between us and Nigel Mansell now" following frank talks between the driver and the team manager Cesare Fiorio. "The only thing wrong with the car is that the seat was designed for Alain Prost," said the spokesman. A statement is expected from Mansell in Britain, but none is issued by midnight on Wednesday.

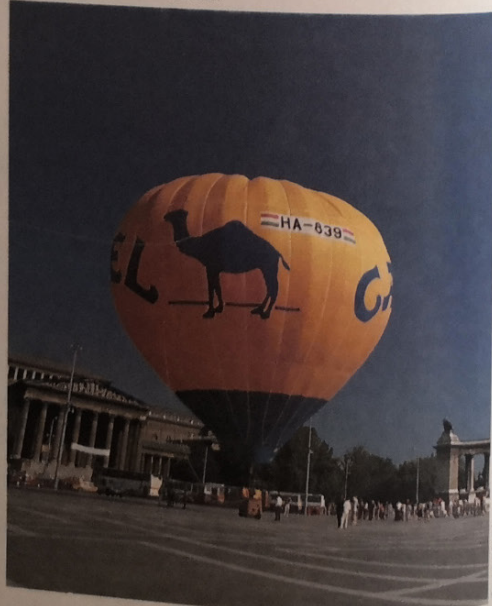
PE

Is Herbert's hat back in the ring?



(Dominique Leroy)

The balloon goes up - for Lotus, at least



(Dominique Leroy)



(Dominique Leroy)

Sometimes, with the best will in the world, an attempt to offer help in a motor racing situation can go badly wrong. Take the recent case of Philippe Alliot and the mysterious hand at Hockenheim.

There he was, minding his own business at the start, when two cars in front collided. One of them, the Dallara of Emanuele Pirro, took a three-wheeled turn towards the pit wall. Alliot, following closely, had no alternative but to do likewise.

He came to a halt without having touched either the wall or Pirro's car. And his engine was still running. But not for long. Before he could think about extricating himself from the mess, a hand appeared from above Alliot's head and popped his seat harness buckle. Worse than that, this well-meaning hand, retreating swiftly when the driver's views on the subject were quickly made known, then inadvertently flicked off the ignition switch. If Alliot was cross before, he was incandescent now.

There was no alternative but to receive a push start, Alliot then setting off in pursuit of the pack, secure in the knowledge that the rules would be waived in this instance.

In fact, the only thing to be waved was a black flag, accompanied by Alliot's number. And it took the officials a dozen laps or so to make up their minds that he was wasting his time out there. The rules had been broken and that's all there was to it. Alliot had received outside assistance to start his car; he was disqualified. Looking at the facts as we now know them, it was a very harsh decision, ranking alongside the exclusion of Roberto Moreno for receiving a push-start during qualifying for the Mexican Grand Prix. The rules have since been modified to apply only to the race, but such a sensible amendment does not compensate poor Moreno for the loss of one of the few chances he has had to go racing on a Sunday afternoon. And there is no recompense for Alliot either, even though the officials probably did not realise the true cause of his distress on the start line.

Pit lane opinion, however, seems to accept that the regulation is acceptable. If a driver spins and stalls, then he only has himself to blame. Anyway, who is to

ON THE OTHER HAND



THE MAURICE HAMILTON COLUMN

decide when a car is parked in a dangerous position - the one reason which hitherto allowed a driver to receive a push-start? And, as the Senna

Hockenheim - accident looking for a place to happen



incident at Suzuka proved, the question of rejoining without causing an infringement is yet another grey area within the regulations. And if you want to talk about danger, then the element of risk for the remaining drivers is increased when a stranded competitor demands to be pushed along the track.

Surely, since on-board starters are not forbidden, the answer would be for each car to carry one. I put this suggestion to a few of the designers. Silly me. "What" screeched one, "you are talking 10 to 20 kilos here. D'you realise what that means?" I got the impression it was like asking Boat Race crews to tow their mooring barges from Putney to Chiswick.

Apart from the weight penalty imposed by the battery necessary to fire a starter, room to carry such a large battery is no longer available. The heavy rotating mass of the starter ring gear is another hindrance. Besides which, engines are now designed around smaller flywheels and clutches, the block dimensions have changed accordingly and crankshafts are lower.

On-board starters are not out of the question; it's just that they are now more trouble than they are worth. Better to risk having your man post a retirement if he spins and stalls rather than provide him with the necessary hardware to get going again.

The question of receiving outside assistance is not new. In the 1960's, a driver was not supposed to receive help from anyone other than his pit crew. But that did not prevent anomalies such as sundry trackside personnel providing drivers with cold drinks and buckets of water during exceptionally hot races.

The Argentine Grand Prix was a case in point and the hairpin before the pits the ideal place for this unofficial dispensing of refreshments. This, of course, was in the days of the open-face helmet and it would not be uncommon to see drivers arriving at the corner, their mouths open, goldfish style, waiting to receive whatever airborne liquid might come their way. The question of the track subsequently being bone dry elsewhere and awash at this point did not seem to arise. Mind you, I know journalists and pho-



Alliot: the expression says it all - and worse was to come with his exclusion at Spa

tographers who, given the opportunity today, would not be averse to throwing a bucket of something wet over one or two of our overheating heroes. It was in Argentina in 1955 that Stirling Moss took steps to deal with the searing heat which was beginning to impair his driving. Reasoning that it was a long race, Moss pulled his Mercedes-Benz to one side, the better to have a short breather. Marshals ran to the car and, suspecting that Moss had collapsed from the heat, dragged him from the cockpit. Moss's rescuers did not speak English and, the more he protested, the more convinced they became that the poor man was demented; an Englishman overcome by the sun. He was finally released thanks to the intervention of a doctor who understood Moss's increasingly frantic protests of innocence.

Quite often, the best intentions of those running to the aid of the injured party have reached an unhappy conclusion. During the 1954 Syracuse Grand Prix, Mike Hawthorn glanced a wall with his Ferrari. The impact caused the filler cap to pop open and fuel to spill onto the hot exhaust. In an instant, the car was on fire and Hawthorn's clothes were alight. He pulled up and quickly jumped over the wall before rolling in the field beyond. By the time Hawthorn had snuffed out his burning clothing, Froilan Gonzalez had arrived on the scene and, seeing the blazing Ferrari, assumed his teammate was trapped inside.

Gonzalez stopped and ran back, increasingly worried by the lack of activity from within the inferno. His relief at finding Hawthorn safe and well was tempered somewhat by the sight of his car rolling down the slope and into Hawthorn's abandoned Ferrari.

Both cars were totally destroyed.

On a happier note, Hawthorn received assistance of a more novel kind at the end of the 1958 British Grand Prix. For most of the race, the marshals at Becketts had been taunting the Englishman by cheerily waving pints of bitter each time Hawthorn went by.

On his last lap, Hawthorn signalled that he wouldn't mind a drink. Sure enough, on his slowing down lap, the marshals - one of whom was the father of Ian Phillips, the team manager at Leyton House - presented Hawthorn with a pint and he duly arrived at the pits, swigging its contents.

It was the talking point of the paddock. Indeed, one of Hawthorn's friends overheard a spectator tell his girlfriend that it was a gimmick. Apparently the man confided to his astonished lady that he had it on good authority that Hawthorn carried the

pint with him in the car throughout the race!

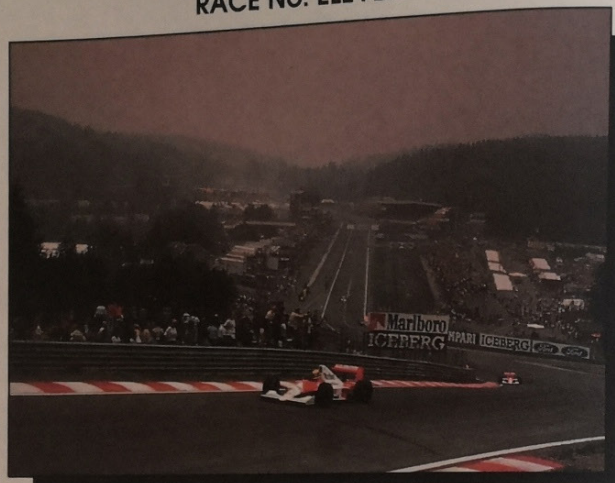
Clearly, outside assistance can take many forms. There was the celebrated occasion during practice at Monaco when Tommy Byrne's car stopped at the far side of the circuit. Unsure of his surroundings, Byrne found himself outside the track. He hailed a taxi and got to within striking distance of the pits - only to discover that he had no money with which to settle the fare. Being an Irishman of a fast-talking nature, he managed to reach some form of bartering arrangement with the driver. Then there was the story of Brian Henton during the Canadian Grand Prix. Suddenly he went missing and the Tyrrell mechanics, seeing television pictures of their car on the hook of a crane, figured, quite reasonably, that Henton was out.

About 15 minutes later, just as they had finishing packing up Henton's pit equipment, he flashed past the pits, motoring flat-out as though nothing had happened. The mechanics thought they were seeing things. They waited another minute or two. And there he was again, four or five laps down but running strongly. ▶

Moss - always time for a cuppa!



1990 FORMULA ONE GRAND PRIX CHAMPIONSHIP RACE No. ELEVEN



Senna surged clear at Spa.

BELGIUM

AUGUST 26 1990

IF further evidence was required after Hockenheim and Hungaroring, that Ayrton Senna and McLaren had found the road out of the aerodynamic wilderness of Ricard and Silverstone, then Spa laid it out with the precision of a prosecuting counsel.

On the weekend in which he finally agreed terms to stay with Honda Marlboro McLaren for another season — the fact that he has only signed a one-year deal with an option on his side for 1992 indicates that he scored a psychological victory over team boss Ron Dennis — Senna took it all and moved a giant stride towards his second World Championship. Pole position (his 48th), the lead in each of three starts, and a clear, clean victory. Prost took fastest lap but that scarcely bothered the man who could now concentrate fully on his driving instead of the endless negotiations, and whose success brought him level in the all-time winning stakes with Jim Clark and Niki Lauda.

David Tremayne

And yet his weekend had begun badly, with a spin at Rivage on Friday morning which could have had nasty consequences. As he sat stationary in the middle of the road, and an approaching Martin Donnelly twitched his poor-handling Lotus round the back of him, the yellow

Berger wasted energy with too much wheel-spin and then cut dramatically across Prost's bows

car lost its right rear wheel due to a faulty retaining nut. For an instant 30 pounds of wheel and tyre headed towards the McLaren's cockpit, but literally in the nick of time the Brazilian accelerated in first

gear and the errant wheel instead smashed his rear wing. It was a close run thing.

For the remainder of the day, and for Saturday morning, Senna played second fiddle to Gerhard Berger as the Austrian vied with Prost for fastest time, while Nigel Mansell watched sullenly from the sidelines unable to get his Ferrari within a second of the Frenchman's. It was the Briton who would suffer most in the first startline incident, when Nelson Piquet locked up his Benetton under braking for La Source as the grid departed, and rammed straight into the back of the Ferrari. The impact wasn't so bad; the need to switch to Prost's spare was. From that moment on, Mansell's race was doomed.

That time, and the next when Berger wasted energy with too much wheelspin and then cut dramatically across Prost's bows, it was Senna who capitalised on his pole — can you remember the last time he made a really bad start? And Thierry Boutsen it thus was, the



Mayhem at La Source as Piquet punts Mansell into the barriers.

The remains of Barilla's Minardi show the effects of his crash at Raidillon.

outcast in the Williams' camp and fourth on the grid after a qualifying spent chasing mechanical grip, who took full advantage of Gerhard's move to run second until, again, there was a flurry of red flags. This time Martini and de Cesaris had tangled at Les Combes but, worse still, Paolo Barilla had backed his Minardi into the Armco at Raidillon. This was a big accident which tore the gearbox and rear wheels off the M190 and spilled its cogs all over the track. The barriers, too, were opened like one of Jack the Ripper's victims. Paolo, a nice man in a sport where natural charm is a rare commodity, was shaken but unhurt.

Now in F1 there is only one God, and that is Television. Already there had been the better part of a half hour delay, and the schedulers were getting a little edgy. Those who saw the gap between the Armco groaned inwardly at the



1990 FORMULA ONE GRAND
PRIX CHAMPIONSHIP
RACE NO. ELEVEN

BELGIUM

prospect of at least an hour's delay as fresh sections were installed. If the installers were as sensible as the grid marshal who showed Olivier Grouillard to his slot, and then for two of the three starts elected to stay the wrong side of the barrier as the cars took off, it might have taken even longer.

But no. Somebody had a Great Idea. Barilla had already demonstrated the destructive capabilities of the modern F1 car, just as Philippe Streiff and Jonathan Palmer did at the same spot in their Tyrrells three years back, but needs must when Television drives. Repair the gaping hole? Heaven forbid! No, the easy way, the Television-placating way, was simply to shove a pile of old tyres in front of it and hope nobody else went off there. As it happened, nobody did, but a car found its way between the tyres and that gap — and Nelson Piquet's Saturday qualifying spin out of the Bus Stop chicane and into the pit entry lane had already given a graphic indication of just how much an out-of-control F1 is capable of bending the laws of physics — we might have been reporting another tragedy similar to that which beheaded Helmuth Koenig at Watkins Glen back in 1974. And people prattle on about progress in F1.

When the remaining 23 cars lined up on the grid and Martin Donnelly prepared the start from the pit road, we could take stock. Mansell was in the spare F1/90 which was, to be fair, set for Prost who is shorter and lighter and can drive a car with little rear wing and resultant oversteer. Piquet, Nakajima, Larini and de Cesaris were in their spare cars. Modena had a punctured left rear Pirelli replaced and Donnelly, his own Lotus unable to start at La Source and a thus non-starter for the second attempt, got a reprieve for the third and went into it in Warwick's race car. The one he himself had run into in the first start! Suzuki had nothing, because he'd two-wheeled his Larrousse

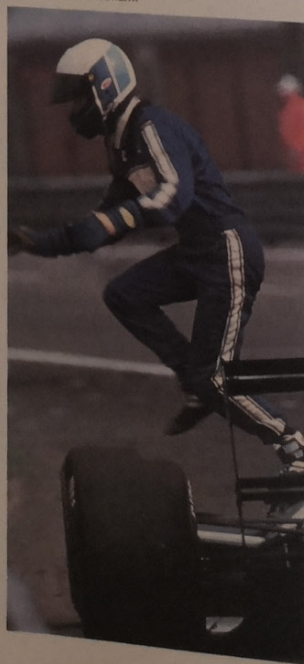


A charging drive ended in disappointment for Boutsen.

Lola over the recovering Piquet, and had already damaged his intended race car in the morning warm-up. That was a shame, after he'd impressed yet again with 11th fastest time in qualifying.

Third time around, Senna led Berger off the line, with Prost clearly bottled up behind the second McLaren. The Frenchman had been fastest in the morning warm-up, when he was said to be running some Goodyear A compound tyres

Early finish for Brabham.



held over from Silverstone, much to the chagrin of McLaren, whose protest to Goodyear was eventually said to have resulted in Ferrari being 'asked' to revert to Bs like everyone else. As Gerhard destroyed his tyres running third, Prost moved swiftly up on Senna. When the Brazilian came in for a fresh set of Bs on lap 22, Prost came screaming in less than half a second adrift. But had he come in only because he saw that Ayrton had? Was it a tiny error of judgement? "I just decided to stop after talking to my pit," he admitted. Had he stayed out a lap, it might have been different.

McLaren got Senna out three seconds faster than Ferrari did Prost, and that delay was critical. It meant that while Senna literally just squeaked out in front of the impressive Sandro Nannini, who would run non-stop in his Benetton, Prost got out behind the green car. Both of the B190s were very, very quick on the straight, as they were in Hockenheim and Hungary, and Senna knew full well from both

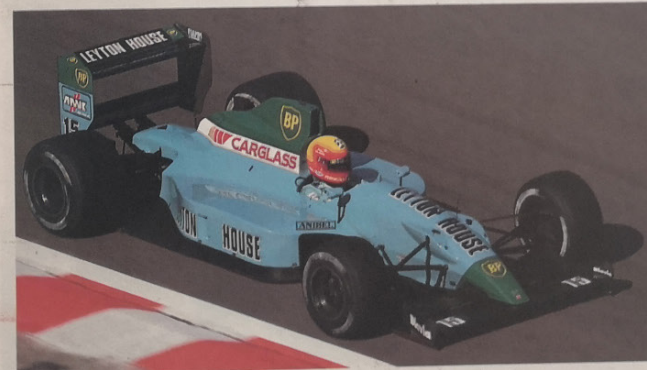
Nannini, surely the most improved F1 driver this year

that it would be tough passing. Now, with the clear road, he went free. Prost lost two further seconds before he finally found a way by, and later another four in one lap to the obstructive but hard charging Alboreto. After that the battle was over.



Nannini — three more points.

Berger, like Prost, got caught behind a Benetton after his early tyre stop, this time Piquet's. The Brazilian's spare was understeering too much, but he held Gerhard back long enough for the Austrian to have taken off any edge his new rubber had by the time he overtook. Thus Nannini, surely the most improved F1 driver this year, was able to keep the second McLaren at bay. In fact, when you looked at the top four, you began to realise just how important Senna is to Ron Dennis.



Gugelmin finished in the points for the first time this year.

Without him, McLaren would just be another race team the way things are at present.

On lap 37 Berger finally towed by Nannini up Raidillon as they came up to lap Alex Caffi, into a determined drive in his Footwork Arrows and running a good tenth. Nannini, however, the new, mature Nannini who has eschewed tobacco and coffee, came right back at him under braking for Les Combes, and as they ran round the right, left, right complex side by side, he emerged back in third place after some minor wheel rubbing. Berger, mindful that Ron Dennis had been warned by the stewards that his drivers would be penalised if they employed Hungarian tactics for a

second race, watched and made a mental note.

Sandro was quite convinced he could have kept the MP4/5B behind him to the end, but a wild slide up Eau Rouge lost him vital momentum on lap 42, and this time Berger made it stick. With Piquet following Nannini home fifth, however, Benetton could at least console itself that it has made significant progress in the last three events.

So, too, has Leyton House, and though Capelli's chances of the final point were dimmed by tyre problems that led to serious oversteer in the closing stages, Gugelmin was on a charge that took him from 14th on the opening lap to sixth by the halfway point. After yet further fuel pump drive problems in qualifying, the Brazilian was delighted with a reliable run. A finish would have been good enough, but to score a point went a long way towards repaying the stoical manner in which he has endured the team's recent problems. Not only that, it

Jean Alesi stirred up his 019 for ninth fastest and was probably the one topline who could take Eau Rouge flat. Mansell tried it twice without success, and Senna admitted that on the lap he'd decided to give it a go, he changed his mind going down the hill! A good race for the team looked in prospect when Satoru Nakajima planted his car, impressively, alongside Jean's but the Japanese was out within laps, and the Frenchman couldn't ultimately catch Capelli after a stop for fresh Pirellis. Now that all development is concentrated on the Honda-powered 020, Tyrrell has lost a little of its early season momentum.

With the lone Larrousse Lola Eric Bernard had a quiet run to ninth, losing all but sixth gear in the closing stages but nevertheless finishing well clear of the press-on Caffi. The Brescian came out on top of a close early duel with Warwick, who just led home team-mate Donnelly. The Ulsterman's Lotus had a cracked exhaust as a legacy of being hit earlier on, when Warwick was driving, and afterwards the Englishman was less than impressed to have been taken out by his team-mate. "What could I do?" countered Donnelly. He'd been pushed into the wall by Caffi, and had then tobogganed helplessly into Derek as his undertray skidded over the kerb and left him without steering or braking.

Both Brabhams retired near the end, Modena with suspected engine or transmission failure judging by the oil smoke (he said, rather implausibly, that it was the clutch) and Brabham with an electrical short, leaving Alboreto to lead home the vibrating Larini, Martini and the Arnoux-like Grouillard.

And Mansell? After falling behind Capelli and Alesi into tenth place he pitted to see if new tyres could cure vicious oversteer. When they couldn't he quit after 19 laps, describing the Ferrari as "dangerous, lethal". It was an attitude that went down like a wingless plane with Cesare Fiorio, and even led to suggestions he might be "rested" for the remainder of the season.

It was an unhappy situation to see one of the world's hardest chargers giving up. And it suggested, after all the talk of a possible switch to McLaren if Senna left, and then further overtures from Frank now that Senna wasn't going to Williams, that there really wasn't much chance of him changing his mind about retirement, after all.

1990 FORMULA ONE GRAND
PRIX CHAMPIONSHIP
RACE NO. ELEVEN

BELGIUM

FROM THE COCKPIT

"I FELT very relaxed when I got to Spa because I had just signed a new contract with Benetton and the car is improving race by race. It is a good feeling and Spa is a circuit I like, although it is not my favourite. I knew, too, that it would be entirely different to Hungary and I decided beforehand not to let anything that happened there affect me.

"That was just a race problem with Senna and as far as I am concerned it was all over and forgotten. In my opinion, all the top teams had a chance to win this race — and the championship — which is good for the spectators and the drivers.

"I first drove at Spa in 1983, I think, in Formula Three. I think the circuit is nice, but I must say I prefer Imola. It is just more interesting and more appealing to me.

"On the first day of qualifying here, I thought it was much more slippery than it was last year, but it was probably just the temperature. It was quite hot which is not usual for Spa.

"Our team has been very pleased with everything so far this year and we were hoping to be competitive. We have made progress race by race with the engine and the chassis. And we have much better balance too. Last year we had a traction problem, but this year we don't.

"On Friday, on my first set of qualifiers, I had to back off a little and lost time when I found de Cesaris in my way. But the car felt really good, so I put on the second set of Es straightaway and went back out.

"Unfortunately, as I started my quick lap, I locked up going into La Source and ran wide, so I aborted that lap. That meant another slow lap, but the tyres had gone off before I could finish my quick lap.

"We tried swapping round the first set of tyres and going out again — but it was no good.

"On Saturday, I chose a set of Bs

Alessandro Nannini came to Belgium trying to make up for his disappointment in Hungary, where he was running a strong second before being forced to retire after a collision with Ayrton Senna. Timothy Collings reports.

and one set of Es. After a few laps with the Bs, I switched to the qualifiers and set my time. After that, I went back to the Bs to do some more work on the race set-up.

"Obviously, I did not improve my time, but that was not the point of the exercise. It was all good work for the team and sixth on the grid was not a bad position to have in the end particularly with a good

race set-up. It was not bad at all.

"The race of course was not easy after having three starts, but I was quite pleased with the car and the race. We planned to run non-stop in the race itself and it nearly paid off for me when Senna made his pit-stop and he and I were very close after he came out.

"I had understeer throughout the race unfortunately, but it wasn't quite so bad towards the end. I had a big fight on my hands to keep Berger behind me and out of third place but three laps from the end I got into a big slide going through Raidillon and he got by me. I was not able to get back unfortunately but I do think that if it had not been for that slide I might have kept third place. The engine was no problem at all and ran really well. So it was a big shame not to get third place."



AT THE TRACKSIDE

Senna agrees new one-year deal with McLaren

Little more than 24 hours after Ferrari's brief announcement, McLaren released a similar one to say that the team had reached agreement with Ayrton Senna on the terms under which he "will continue to drive for the team in 1991". The official statement, released early on Saturday morning,



said terms had been agreed after "long and detailed negotiations" and that the contract provided for an optional second year (1992). After claiming pole position later on Saturday, Senna said the negotiations between him and Ron Dennis had "gone on far too long" and had been an unwanted drain on his concentration and energy for several months. He admitted he was relieved they were over, but declined to go into detail on his fee or the option. Senna did say, however, that the deal was "complex" in both a technical and commercial sense. Several sources suggested the option was performance-related and that it would only be exercised if both sides were satisfied with the other's work in 1991.

Prost agrees to stay with Ferrari

Alain Prost provided the first big news of an eventful weekend with confirmation that he had agreed to drive for Ferrari again in 1991. The Frenchman's decision was announced in a statement issued by

the Maranello team on the eve of the race. The Ferrari statement said both parties had agreed to take up their option to stay together for next year, but gave no details on Prost's driving status. Team manager Cesare Fiorio said it did not matter to the team if Prost was classified as number one driver or not and dismissed suggestions that Nigel Mansell's intention to retire had played any part in the delay in Prost's announcement. He said the team had a short list of drivers being considered as Mansell's replacement and intended to talk again to the British driver before ruling him out finally from any decision about Prost's partner in 1991. Rumours in the paddock suggested Mansell was in a strong position, however, because he had not yet formally handed in his notice to quit to Ferrari. In theory, this meant Ferrari could not complete the formality of re-signing Prost until the Mansell situation was resolved. Mansell, it was believed, retained Ferrari's number one status for 1991 on paper at least in his own contract with the team.

Monteverdi pull out of Formula One

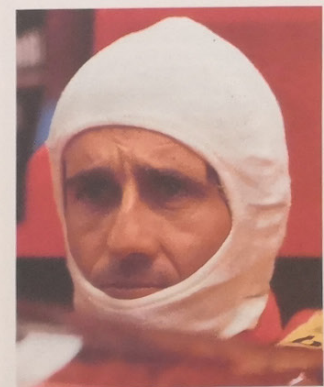
The Monteverdi team pulled out of the world championship on the eve of Spa with a brief announcement explaining that they were not able to pay for their supply of tyres from Goodyear. The tyre company's spokesman Barry Griffin said the first he knew of any withdrawal by the former Onyx equipe came when he arrived at the circuit. A week previously, Monteverdi's test session at Monza was the source of much humour and ridicule because, following the resignation of Gregor Foitek, they arrived to test only one car — for J. J. Lehto — and damaged it as they took it off the transporter. Lehto said it was the last straw for him, but he was present in Spa and spent much of his weekend with various gentlemen at the Marlboro motorhome.

Alesi — where next?

Jean Alesi's future was the subject of renewed speculation after the announcements from Ferrari and McLaren. He had spent much of Thursday afternoon with Eddie Jordan, his former boss in Formula 3000, and on the same day Jordan and Alesi were seen visiting the Canon Williams Renault motorhome in the Spa paddock. With Senna ruling himself out of the equation for possible drivers at Williams in 1991, Alesi's name was said to be at the top of the Williams wanted list. The speculation intensified on Saturday evening when, following the announcements from Ferrari and McLaren, Alesi was again spied on frequent visits to the Williams' motorhome.

Prost criticises Berger for start moves

Alain Prost aroused mixed reactions for his comments after the Belgian Grand Prix that Gerhard Berger had driven in a manner which was "unacceptable to me" at the start of the race. Berger had been seen to swerve across the path of Prost's Ferrari as the cars left the grid in a



bid to obtain a better line and to prevent the Ferraris of both Prost and Mansell surging through towards La Source. "Gerhard did something today which is unacceptable to me," said Prost. "It is the responsibility of the drivers to drive in a certain way and Gerhard did not do this. Drivers have to show a certain kind of discipline." Berger said he had suffered a lot of wheel-spin and only did what was normal in all the circumstances. But, he admitted: "I know it was not 100 per cent right."

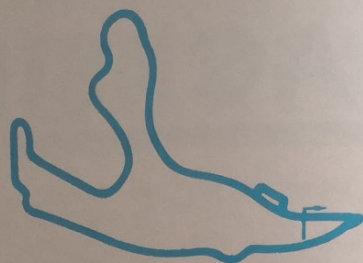
Compiled by Timothy Collings.

1990 FORMULA ONE GRAND PRIX RACE No. ELEVEN

SPA- FRANCORCHAMPS BELGIUM

26 AUGUST 1990

Circuit length: 4.312 miles/6.940 km
Race distance: 44 laps (189.742 miles/305.360 km)



DRIVERS' WORLD CHAMPIONSHIP

Pos.	Driver	Total
1	Ayrton Senna	63
2	Alain Prost	50
3	Gerhard Berger	33
4	Thierry Boutsen	27
5	Nelson Piquet	24
6	Alessandro Nannini	16
7	Riccardo Patrese	15
8	Jean Alesi	13
9	Nigel Mansell	13
10	Ivan Capelli	6
11	Eric Bernard	5
12	Derek Warwick	3
13	Alex Caffi	2
14	Stefano Modena	2
15	Mauricio Gugelmin	1
	Satoru Nakajima	1
	Aguri Suzuki	1

CONSTRUCTORS' WORLD CHAMPIONSHIP

Pos.	Team	Total
1	McLaren	96
2	Ferrari	63
3	Williams	42
4	Benetton	40
5	Tyrrell	14
6	Leyton House	7
7	Larrousse	6
8	Lotus	3
9	Arrows	2
	Brabham	2



A painful weekend for Patrese and Canon Williams.

OFFICIAL STARTING GRID

Gerhard Berger McLaren-Honda MP4/5	1.50.948	28	27	Ayrton Senna McLaren-Honda MP4/5	1.50.365
Thierry Boutsen Williams-Renault FW13B	1.51.902	5	1	Alain Prost Ferrari 641	1.51.043
Alessandro Nannini Benetton-Ford B190	1.52.648	19	2	Nigel Mansell Ferrari 641	1.52.267
Nelson Piquet Benetton-Ford B190	1.52.853	20	6	Riccardo Patrese Williams-Renault FW13B	1.52.703
Satoru Nakajima Tyrrell 019	1.53.468	3	4	Jean Alesi Tyrrell-Ford 019	1.52.885
Ivan Capelli Leyton House-Judd CG901	1.53.783	16	30	Aguri Suzuki Larrousse-Lamborghini 90	1.53.523
Mauricio Gugelmin Leyton House-Judd CG901	1.54.120	15	8	Stefano Modena Brabham-Judd BT59	1.53.916
Pierluigi Martini Minardi-Ford M190	1.54.312	23	29	Eric Bernard Larrousse-Lamborghini 90	1.54.251
Derek Warwick Lotus-Lamborghini 102	1.55.068	11	21	Emanuele Pirro Dallara-Ford BMS190	1.54.595
Andrea de Cesaris Dallara-Ford BMS190	1.55.261	22	10	Alex Caffi Arrows-Ford A11	1.55.199
Martin Donnelly Lotus-Lamborghini 102	1.55.304	12	25	Nicola Larini Ligier-Ford JS33B	1.55.278
David Brabham Brabham-Judd BT59	1.55.668	7	14	Olivier Grouillard Osella-Ford FA1M	1.55.334
Michele Alboreto Arrows-Ford A11	1.56.055	9	24	Paolo Barilla Minardi-Ford M190	1.55.859

RACE CLASSIFICATION

Pos.	Driver	No.	Nat.	Car	Laps	Time/Retirement
1	A. Senna	27	Bra	McLaren-Honda (G)	44	1:26.31.997
2	A. Prost	1	Fra	Ferrari (G)	44	1:26.35.547
3	G. Berger	28	Aut	McLaren-Honda (G)	44	1:27.00.459
4	A. Nannini	19	Ita	Benetton-Ford (G)	44	1:27.21.334
5	N. Piquet	20	Bra	Benetton-Ford (G)	44	1:28.01.647
6	M. Gugelmin	15	Bra	Leyton House-Judd (G)	44	1:28.20.848
7	I. Capelli	16	Ita	Leyton House-Judd (G)	43	
8	J. Alesi	4	Fra	Tyrrell-Ford (P)	43	
9	E. Bernard	29	Fra	Larrousse-Lamborghini (G)	43	
10	A. Caffi	10	Ita	Arrows-Ford (G)	43	
11	D. Warwick	11	GB	Lotus-Lamborghini (G)	43	
12	M. Donnelly	12	GB	Lotus-Lamborghini (G)	43	
13	M. Alboreto	9	Ita	Arrows-Ford (G)	43	
14	N. Larini	25	Ita	Ligier-Ford (G)	42	
15	P. Martini	23	Ita	Minardi-Ford (P)	42	
16	O. Grouillard	14	Fra	Osella-Ford (P)	42	
17	S. Modena	8	Ita	Brabham-Judd (P)	39	Clutch
R	D. Brabham	7	Aus	Brabham-Judd (P)	36	Electrics
R	A. de Cesaris	22	Ita	Dallara-Ford (G)	27	Engine
R	T. Boutsen	5	Bel	Williams-Renault (G)	21	C.V. joint
R	N. Mansell	2	GB	Ferrari (G)	19	Oversteer
R	R. Patrese	6	Ita	Williams-Renault (G)	18	Gearbox
R	E. Pirro	21	Ita	Dallara-Ford (P)	5	Water pump
R	S. Nakajima	3	Jap	Tyrrell-Ford (P)	4	Accident
DNS	P. Barilla	24	Ita	Minardi-Ford (P)		Accident
DNS	A. Suzuki	30	Jap	Larrousse-Lamborghini (G)		Accident



Fastest Lap: A. Prost (1) Lap 38
1.55.087, 134.896 mph/217.088 km/h
(G) = Goodyear tyres. (P) = Pirelli tyres.

FASTEST LAPS

27. 1.55.132	25. 1.59.956
1. 1.55.087	23. 2.00.157
28. 1.55.531	14. 2.00.886
19. 1.55.650	8. 1.59.415
20. 1.57.036	7. 2.01.959
15. 1.58.163	22. 2.02.225
16. 1.58.351	5. 1.58.199
4. 1.58.531	2. 1.59.767
29. 1.56.531	6. 1.58.666
10. 2.00.610	21. 2.03.152
11. 1.59.081	3. 2.16.599
12. 1.58.330	
9. 2.00.671	

PREQUALIFYING

No.	Name	Car	Time
14	O. Grouillard	Osella-Ford	1:57.941
18	Y. Dalmás	AGS-Ford	1:58.339
31	B. Gachot	Coloni-Ford	1:59.130
17	G. Tarquini	AGS-Ford	1:59.910
33	R. Moreno	EuroBrun-Judd	2:00.270
34	C. Langes	EuroBrun-Judd	2:01.405
39	B. Giacomelli	Life	2:19.445

- Moreno hindered by engine problems.
- Withdrawal of Monteverdi means Ligier are promoted out of pre-qualifying.

NON QUALIFIERS

No.	Name	Car	Time
26	P. Alliot	Ligier-Ford	1:56.118*
17	G. Tarquini	AGS-Ford	1:57.566
18	Y. Dalmás	AGS-Ford	1:57.704
31	B. Gachot	Coloni-Ford	1:58.520

*Alliot excluded due to rear wing entanglement.

- Tarquini slowed by misfiring engine.
- Dalmás — lack of balance.

- Twenty-fifth victory of Senna's career: this makes him the most successful South American Grand Prix driver of all time and equals the record of Jim Clark and Niki Lauda.
- Senna's 48th pole position — he eclipsed Clark's record of 33 last season.
- Gugelmin's first point of the 1990 season — in fact his first top six finish since Brazil 1989.
- Race restarted twice because of accidents.
- Next round: Italy, Monza, September 9th.

The sweeping beauty of Spa-Francorchamps.





1990 FORMULA ONE GRAND PRIX CHAMPIONSHIP RACE No. TWELVE



ITALY

SEPTEMBER 9 1990

"It is a start," said Ayrton Senna. He was not making an oblique reference to the second, successful bid to get the Italian GP under way. Nor to the now 16-point lead he enjoyed in the World Championship battle after scoring his first triumph at the Monza circuit, and the 26th of his career.

He was talking, quietly and without side, to his coterie of Brazilian journalists immediately after the official post-race interview session had exploded a bombshell every bit as potent in its way as last year's when Prost had given his victor's trophy to the tifosi, and brought to a climax an emotional day which had already seen Derek Warwick walk, then run, away from one of the biggest accidents in recent F1 history.

Declaration: I like Derek. More than that, I am fond of him, in the way that you are when you think of somebody and can do so without any rancour or ill-feeling. I don't

David Tremayne

know anyone who feels differently. It isn't his fault that F1 has dealt him a hand of bum cards for so many years, and every time he gets into an F1 car he gives it everything he

Derek has everything a Grand Prix driver should have.

has. In truth, there are not that many drivers you can say that about, no matter what some might say to the contrary. Study the Olivetti lap by lap printouts and you'll see what I mean. Derek has everything a Grand Prix driver should have, except a decent ride and a string of victories behind him. Integrity, humour and honesty are the qualities he brings to mind.

It was a bad moment, watching that shunt he had at Parabolica in the first start, and hundreds shared

such personal feelings of anxiety, for Derek is the most popular driver in F1.

What went wrong? "I was following Gugelmin, and I just got too close to him," he explained after that dramatic run back to the pits. "I lost front downforce and couldn't lift from the throttle. The car started to understeer, and as soon as I touched the grass, it went into the barriers."

What the hell went through his mind?

"I was conscious all the time, and as soon as the car was starting to slide upside down, I started to organise mentally, because I was afraid of fire. As soon as the car stopped, I thought of getting out of it, but I was scared that someone might hit me as I was coming out." With some of the drivers coming up behind, that was a very real possibility. As it was, several of them had very lucky escapes either from striking the upturned 102, or from being struck by its errant wheels.

Derek did walk away, very steadily for someone who had just been through a shunt at all of 150 mph, maybe more. "My first reaction was 'I'm okay.' My second one was: 'Spare car.'" The racer's mentality.

In some quarters of F1 — indeed, elsewhere in racing — there is an air almost of complacency over safety. Maybe complacency isn't quite the right word, but some drivers (not Warwick) have the attitude that the current generation of cars is infallible, hence track manners need not be as sharp and gentlemanly as they were in the days of Jim Clark. It is an attitude that has Jackie Stewart, for one, extremely worried. It is the downside of progress, but at Monza we were all thankful such progress has been made. The tifosi lionised the Englishman as he was able to sprint back for his spare car and spare helmet. The original had been ground away, the damage fortunately minimised as he managed to keep his head up as high as possible as Monza passed beneath it at speed.

It would be nice to say that he then raced to championship points, helped to put himself where he deserves, in line for plum drives such as a Williams Renault, but perhaps his escape had been fairly tale enough. He lasted until the 16th lap, battling strongly to stay on terms with Capelli, Nakajima and Suzuki for the tenth place that had seemed his right throughout qualifying. Then his clutch packed up, and he joined team-mate Martin Donnelly in a slough of Lotus despondency, the Briton having already retired with a grenaded



Derek's courage brought no better reward than Martin's effort.

Lamborghini V12 when chasing Gugelmin for what would become sixth place. Monza has long been a bitter-sweet circuit for the Hethel team, and once the euphoria of Derek's escape began to recede, came again the reminder that Lamborghini's abrupt decision to cease engine supply to Lotus and Larrousse for 1991 poses further questions about its chances of ultimate survival.

It would also be nice to say we had a race at Monza, but once again Gerhard Berger spoiled the fun. No disrespect to him, you understand. The man was doing his job. But qualifying and the Sunday morning warm-up had made it clear the race would be fought between Senna — a brilliant fastest with literally only seconds remaining on Saturday afternoon after a host of problems

What am I going to tell Ken? Alesi's tigerish start went west with the back end of the Tyrrell.



1990 FORMULA ONE GRAND
PRIX CHAMPIONSHIP
RACE NO. TWELVE

ITALY

ary. And Jean himself was smarting because Ferrari had finally lost interest in him messing it about, and was making convincing noises about poaching Nannini from Benetton.

What was clear all weekend is that the Postlethwaite/Migeot 019 is a very efficient little car that makes the absolute most of Brian Hart's equally efficient Cosworth DFR derivative. "He was faster than me on the straight," said Prost of Alesi's two mirror-image overtaking moves. And Prost being Prost, he made no attempt to weave or swerve to discourage his rival. The honour of the GP driver lives.

Prost, however, couldn't resist a grin as he described Alesi's early

tions caused his progress to fluctuate.

It was Spa all over again as he and Senna traded fastest lap, but the gap was more than five seconds when Prost took second, and was up to eight by lap 49 as Senna progressed better through traffic and accelerated quicker from the three chicanes.

And then there was de Cesaris. Stand by, folks, the Italian wonderkid will be back again next year courtesy of the Marlboro money that has kept him in F1 even after his McLaren-smashing days of 1981. And again after his performance at Monza you have to ask, why? True, he was chasing after Alex Caffi's well-driven Arrows and fighting with the Brescian's teammate Alboreto when Prost came up to lap them on the 49th tour, but that did not excuse his blatant selfishness. Michele himself was markedly unhelpful to overtaking Ferraris on race day, but de Cesaris lost Prost three and a half seconds in one lap, rather as Michele had lost him four at Spa.

FISA talks of new proposals to penalise, possibly exclude, baulky

fraught on a number of occasions.

Again, Williams and Benetton came away with next to nothing. Patrese drove very well on Bs, the only other driver who selected them besides Senna to go non-stop, but the FW13Bs lacked sheer pace all weekend, and Boutsen fell victim to another suspension failure — the team's second in two races — which was worryingly similar to that which he experienced in testing at Rio last year.

Benetton also lacked pace, Nannini's initial B-shod charge after Mansell for fourth place losing momentum as his tyres went off by the half-distance mark. Eventually he waved the similarly equipped Piquet by, but Nelson then immediately had a puncture in his left rear, slowed, and let Sandro repass. The man hotly tipped to be the next Ferrari driver then thought intelligently, diving into the pits for fresh Goodyears knowing full well that his crippled team-mate would join him any moment. Result: a lot of lost ground.

Through that, Satoru Nakajima guided his Tyrrell to the final point, benefiting also from the retirements



Better fortunes for Japan: another point for Naka-san.

When F1 loses drivers who have fire it will be a sad affair.

departure with that spin in the first chicane on lap five. "He just braked very, very, very, very late," he murmured. There were those who saw Alesi's performance as pointless, foolish, nothing but grandstanding, but when F1 loses drivers who have fire it will be a sad affair.

Superior bottom-end acceleration had got Berger ahead of Prost at both starts, and that, of course, ruined it all. Sit behind another car these days, and you destroy your tyres in the ensuing "dirty air" induced understeer. Berger and Prost both went for Goodyear's harder, theoretically more suitable As, but Senna gambled on softer Bs. If he hadn't taken the lead, had himself had to sit behind others, they would have been destroyed early. But being Senna, he did lead. Throughout. Even Prost blistered his tyres in Berger's wake, and after passing the Austrian on lap 21, when Gerhard's already overstressed brakes played him false at the second chicane, the resulting vibra-



I'm Aguri — fly me!

backmarkers, and at Monza de Cesaris would have been its prime consideration. Any lead battle was well and truly over.

Troubled still by his brakes, Berger trailed home an unhappy third, well ahead of the equally unhappy Mansell, who longed to live up to his 'Lion' mantle in front of the adoring tifosi, but was denied the opportunity by a throttle return spring problem that made life very

of Gugelmin, who looked set for another point after a good performance, and Capelli, who took over the place from the Brazilian. The Japanese admitted he fell asleep partway through, but was roused from his stupor by Nannini's progress and held on to the flag to salvage something for Uncle Ken after Alesi's antics.

The Ligiers again disappointed despite Guy's mighty budget, Pirro

and Martini spun themselves into early retirements, and the Larrousse fell victim to clutch (Bernard) and electrical (Suzuki) failures. Modena was slow away when his clutch slipped, made some ground before retiring with a suspect valve, while Grouillard was halted by the onset of a rear wheel bearing problem and Dalmás was sufficiently delayed by gear selection trouble in the AGS to miss the overall classification.

The aftermath of Warwick's accident had been one of those moments when cynicism was stillborn, and there was another at Monza on Sunday, as once again we were reminded of human values. It came when Berger had left the post-race press conference and an Italian journalist asked Senna and Prost why they hadn't shaken hands after their acrimony as 1989 McLaren team-mates. The air was filled with electric anticipation. It was a tense moment as they responded, very much touch and go. Then Prost, who had tried to do just that in Phoenix and Brazil, and again in recent races, made a little speech. "We are both professionals who share the same passions," he ended, before standing to proffer his hand. Senna, who had earlier said he would only do so if he thought

Prost was sincere, obviously did as he accepted it.

The press room was in uproar by now, excitable Italians delighted by the new entente. A few thought it was a put up job by Marlboro, but it was spontaneous all right. "It is a start," said Ayrton afterwards.

"And yes, I was moved by it."

The World Championship has been all about these two now since 1988, and it was somehow apposite in the moodiness of Monza that they went forward to the final four races in a spirit of mutual acceptance at last.

Prost: professor, professional — and past World Champion?



"IT IS always very beautiful for me to come to Monza because it is the Italian Grand Prix and there are always a lot of people around the Italian drivers. It makes me feel happy but it does not always last.

"It gets very congested and I don't always feel the same about it after I have been here a little while. I arrived on Thursday and then on Friday after practice I went to play golf at a golf course which is near to the autodromo.

"I stay at the Parc Hotel which is near to the circuit and I like to sleep a lot, but it is not easy here. For an Italian driver there is so much happening all the time.

"For an Italian driver, Ferrari is the maximum team."

"I have been connected with Ferrari a lot like all the Italian drivers. For an Italian driver, Ferrari is the maximum team. The best. All of us hope to go to Ferrari.

"But of course only one can go to Ferrari so I think we have to learn how to remain quiet and work hard for our own cars. I think that it is better to think about Minardi now, for me, and perhaps Ferrari tomorrow. Another day.

"I can go to Ferrari after I have thought about it and it happens. But not now. Now is my time to think of now and Minardi. For 1991 I am free, as everyone knows, and of course I have been talked to a lot.

"Now I am waiting for Ferrari, but if in one week Ferrari decided

FROM THE COCKPIT

Pierluigi Martini began 1990 with a brilliant qualifying display in Phoenix where he finished second quickest and on the front row of the grid. But he came to his home race at Monza still searching for his first points of the season against a background of rumours linking him with a seat at Ferrari in 1991.

Timothy Collings reports.

they did not want me I would look for another top team and maybe stay here if I cannot find one.

"This weekend, Friday morning was good for me because it was like an escape. It is normal for me. Every day I go inside my car I am happy. We have a lot of problems for this track for the engine and for the tyres and I expected it to be very hard here for me.

"My car has good balance, but just for qualifying tyres. We do not have a good top speed and after five or six laps we have a problem with the tyres, the race tyres.

"And in my car I have a lot of

understeer. I have worked many times on this problem but it is very difficult. I like the circuit here, but the real thing is that if the car is well balanced I like to drive anywhere. It doesn't matter. Every lap is good if the car feels good.

"This circuit has a lot of quick corners and all quick corners are dangerous if you don't have a good balance because in every corner we stay on the limit and if you don't have a good balance you can make a mistake at any time.

"I am happy with my grid position because I have made the best of my situation. But I prefer to be in front rather than in the 15th position.

"It is also easy to make a mistake here going into the first corner and this is a very quick track.

"Next year, Minardi will have the Ferrari engines in a new car. I wish to have a new experience but if I can only go to a team which is on a par with Minardi or below, I would prefer to stay here."

Pierluigi clocked a best time of one minute and 26.330 seconds in opening qualifying to clinch his place on the grid in 15th place. On the following day, Saturday, he could not improve on 1:26.516.

The race was just a big disappointment. After keeping out of trouble on the first start when Derek Warwick went off in his Camel Lotus, Martini did much the same on his second lap and looked a strong mid-grid challenger until he went off after only eight laps at the first chicane.

A verdict from the team later explained it was a serious suspension problem. A close technical examination showed the right rear suspension upright was broken.

Pierluigi was bitterly disappointed and it showed as he sat on the pit wall during the rest of the race, a downcast figure in search of a new home.

"I wanted to do a lot better especially here," he said, "I am sorry and frustrated at it all."

AT THE TRACKSIDE

New Porsche V12 on schedule

The 1991 Porsche V12 engine, to be used exclusively by Arrows for the next three years, ran for the first time on the test bench in Germany the Thursday before the Italian Grand Prix and managed three hours at "relatively high revs" without a problem. The 1991 chassis is completed and is expected to run under Porsche power before the end of September. The team seems determined to race the new combination before the end of the year.

Lamborghini: Larrousse lose out to Ligier

The Larrousse team confirmed at Monza that they will not have Lamborghini engines in 1991 after the Italian engine manufacturer switched their supply to Ligier, who appear to be willing to meet the \$7 million asking price for a season's supply of the V12. Larrousse are baffled by Lamborghini's actions — carried out after the first deposit on next year's engines was not set before Monza — after a cordial relationship over the last three years. Larrousse have already approached both John Judd and Brian Hart about next year.

Lotus are without the finance to buy the Italian engine and more concerned about finding sponsorship.

Judd V10 programme continues

John Judd reported at Monza that his new V10 engine — which has been bought exclusively by Dallara for 1991 — has run successfully on the dyno for two months. "The power is better already than the current V8 and the engine itself weighs slightly less," he said. The engine is expected to run in this year's BMS190 in late November.

Meanwhile Judd has 38 of the current specification V8 engines (as used this year by Leyton House and Brabham) and is willing to supply up to three teams in 1991 and that could end up including Larrousse and Lotus.



Alesi situation leaves Italians waiting

Jean Alesi's lawyers, trying to unravel the mysteries of his various contracts with Ferrari, Williams and Tyrrell, worked overtime attempting to resolve the Frenchman's situation and with it the entire driver line-up for next year. If Alesi fails to go to Ferrari, who have, like Williams, claimed first option, the Scuderia then have to select another team-mate for Prost. Ivan Capelli, Pierluigi Martini, Stefano Modena, Alessandro Nannini and Riccardo Patrese were all reported to be in the queue, keeping their own teams waiting with Nannini fast favourite to score as we went to press.

New regulations announced by Balestre

Even FISA's official scrutineer Charlie Whiting admitted his surprise when the ruling body's president Jean-Marie Balestre announced new technical specifications in F1 from Imola 1991. Balestre's statement said the "flat bottom from the front edge of the complete front wheel to the rearmost part of the bodywork" would be extended, front and rear wings would be reduced and there would be a new fuel definition. The aim was to cancel downforce and make the cars slower through corners. But, said Whiting, this was only likely to put greater emphasis on brakes and engines. Balestre also announced new cockpit dimensions for 1992, various circuit modifications and the likely inclusion of an "Olympic" Grand Prix at Barcelona in 1992.

Alesi and Mansell — what next?

Jean Alesi and Nigel Mansell remained two of the focal points in the Monza paddock on the eve of the race. Alesi, during testing the previous week, had denied he was poised to sign for Williams and had said he had no intention of driving for them, while Mansell remained enigmatic about his future and said he had received "lots of offers" including one from CART.

But within 24 hours it had all changed after impromptu press conferences given by Frank Williams and Mansell himself. Williams, upset at Alesi's outburst, said he was adamant about holding the young Frenchman to his signed agreement to join his team if he left Tyrrell at the end of the year.

Mansell, who had been linked with Williams too as a replacement for Thierry Boutsen, said he had no intention of changing his mind about retiring "from Formula One" at the end of the year. "Nothing will keep me in Formula One next year," he said.

Williams revealed that he had not renewed his contracts with either of his current drivers, Riccardo Patrese and Thierry Boutsen.

Williams shed further light on his talks with Senna saying he had been trying to sign him since 1984. "I believe I came very, very close to signing him this year," said Williams. "It was not even a decision about money in the end — it was something else that made him resign for McLaren" — although he was not sure what.

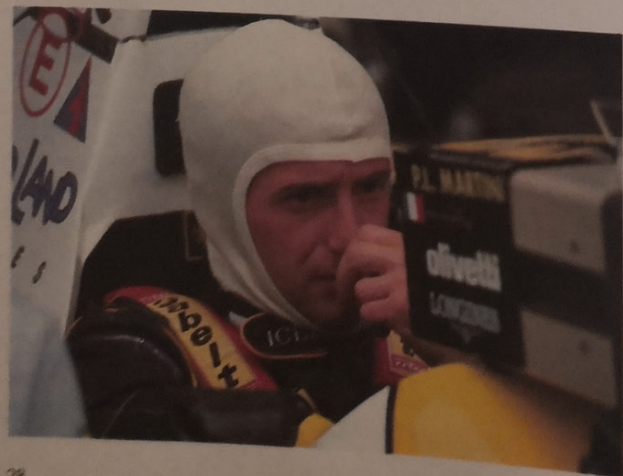
Warwick escapes by a millimetre

It was not clear until after the race how near Derek Warwick came to a blazing inferno in his first lap accident. Charlie Whiting, FISA's scrutineer, said after inspecting his wrecked Lotus that the fuel tank skin was down to the last millimetre. "He was saved by the new regulations. A lucky guy," he said.

Byrne: Goodbye to Benetton?

Rumours surrounding the future of Benetton designer Rory Byrne were confirmed at Monza by his resignation from the team. "He has had an offer he could not refuse," said a spokesman only hours before Reynard announced Byrne as their new design supremo. Reynard are expected to be in F1 in 1992.

Compiled by Timothy Collings and Byron Young.



1990 FORMULA ONE
GRAND PRIX
RACE No. TWELVE

MONZA
ITALY

9 SEPTEMBER 1990

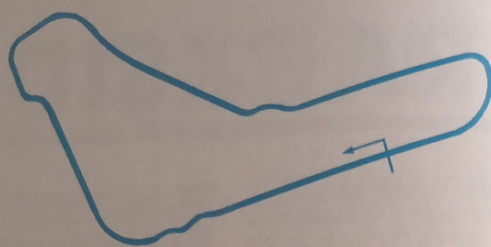
DRIVERS' WORLD
CHAMPIONSHIP

Pos.	Driver	Total
1	Ayrton Senna	72
2	Alain Prost	56
3	Gerhard Berger	37
4	Thierry Boutsen	27
5	Nelson Piquet	24
6	Riccardo Patrese	17
7	Nigel Mansell	16
	Alessandro Nannini	16
9	Jean Alesi	13
10	Ivan Capelli	6
11	Eric Bernard	5
12	Derek Warwick	3
13	Alex Caffi	2
	Stefano Modena	2
	Satoru Nakajima	2
16	Mauricio Gugelmin	1
	Aguri Suzuki	1

CONSTRUCTORS'
WORLD
CHAMPIONSHIP

Pos.	Team	Total
1	McLaren	109
2	Ferrari	72
3	Williams	44
4	Benetton	40
5	Tyrrell	15
6	Leyton House	7
7	Larrousse	6
8	Lotus	3
9	Arrows	2
	Brabham	2

Circuit length: 3.604 miles/5.800 km
Race distance: 53 laps (191.012 miles/307.400 km)



OFFICIAL STARTING GRID

Ayrton Senna McLaren-Honda MP4/5	1.22.533	27	1	Alain Prost Ferrari 641	1.22.935
Gerhard Berger McLaren-Honda MP4/5	1.22.936	28	2	Nigel Mansell Ferrari 641	1.23.141
Jean Alesi Tyrrell-Ford 019	1.23.526	4	5	Thierry Boutsen Williams-Renault FW13B	1.23.984
Riccardo Patrese Williams-Renault FW13B	1.24.253	6	19	Alessandro Nannini Benetton-Ford B190	1.24.583
Nelson Piquet Benetton-Ford B190	1.24.699	20	15	Mauricio Gugelmin Leyton House-Judd CG901	1.25.556
Martin Donnelly Lotus-Lamborghini 102	1.25.629	12	11	Derek Warwick Lotus-Lamborghini 102	1.25.677
Eric Bernard Larrousse-Lamborghini 90	1.25.927	29	3	Satoru Nakajima Tyrrell-Ford 019	1.26.081
Pierluigi Martini Minardi-Ford M190	1.26.330	23	16	Ivan Capelli Leyton House-Judd CG901	1.26.712
Stefano Modena Brabham-Judd BT59	1.26.950	8	30	Aguri Suzuki Larrousse-Lamborghini 90	1.26.962
Emanuele Pirro Dallara-Ford BMS190	1.26.964	21	26	Philippe Alliot Ligier-Ford JS33B	1.27.043
Alex Caffi Arrows-Ford A11	1.27.410	10	9	Michele Alboreto Arrows-Ford A11	1.27.448
Olivier Grouillard Osella-Ford FA1ME90	1.27.541	14	18	Yannick Dalmas AGS-Ford JH24	1.27.673
Andrea de Cesaris Dallara-Ford BMS190	1.27.749	22	25	Nicola Larini Ligier-Ford JS33B	1.27.937

RACE CLASSIFICATION

Pos.	Driver	No.	Nat.	Car	Laps	Time/Retirement
1	A. Senna	27	Bra	McLaren-Honda (G)	53	1:17.57.878
2	A. Prost	1	Fra	Ferrari (G)	53	1:18.03.932
3	G. Berger	28	Aut	McLaren-Honda (G)	53	1:18.05.282
4	N. Mansell	2	GB	Ferrari (G)	53	1:18.54.079
5	R. Patrese	6	Ita	Williams-Renault (G)	53	1:19.23.152
6	S. Nakajima	3	Jap	Tyrrell-Ford (P)	52	
7	N. Piquet	20	Bra	Benetton-Ford (G)	52	
8	A. Nannini	19	Ita	Benetton-Ford (G)	52	
9	A. Caffi	10	Ita	Arrows-Ford (G)	51	
10	A. de Cesaris	22	Ita	Dallara-Ford (P)	51	
11	N. Larini	25	Ita	Ligier-Ford (G)	51	
12	M. Alboreto	9	Ita	Arrows-Ford (G)	50	
13	P. Alliot	26	Fra	Ligier-Ford (G)	50	
14	Y. Dalmas	18	Fra	AGS-Ford (G)	46	
R	I. Capelli	16	Ita	Leyton House-Judd (G)	36	Engine
R	A. Suzuki	30	Jap	Larrousse-Lamborghini (G)	36	Electronics
R	O. Grouillard	14	Fra	Osella-Ford (P)	27	Wheel bearing
R	M. Gugelmin	15	Bra	Leyton House-Judd (G)	24	Engine
R	S. Modena	8	Ita	Brabham-Judd (P)	21	Engine
R	T. Boutsen	5	Bel	Williams-Renault (G)	18	Suspension
R	D. Warwick	11	GB	Lotus-Lamborghini (G)	15	Clutch
R	E. Pirro	21	Ita	Dallara-Ford (P)	14	Spun
R	M. Donnelly	12	GB	Lotus-Lamborghini (G)	13	Engine
R	E. Bernard	29	Fra	Larrousse-Lamborghini (G)	10	Clutch
R	P. Martini	23	Ita	Minardi-Ford (P)	7	Spun
R	J. Alesi	4	Fra	Tyrrell-Ford (P)	4	Spun



Fastest Lap: A. Senna (27) Lap 46
1:26.254, 150.423 mph/242.076 km/h
(G) = Goodyear tyres. (P) = Pirelli tyres.

FASTEST LAPS

27. 1.26.254	18. 1.29.868
1. 1.26.376	16. 1.29.112
28. 1.26.650	30. 1.29.138
2. 1.27.776	14. 1.31.523
6. 1.28.608	15. 1.29.298
3. 1.28.777	8. 1.32.025
20. 1.27.882	5. 1.28.672
19. 1.28.483	11. 1.30.521
10. 1.29.820	21. 1.31.668
22. 1.29.750	12. 1.29.876
25. 1.30.640	29. 1.29.949
9. 1.30.348	23. 1.31.740
26. 1.32.881	4. 1.29.386

- Honda's 150th Grand Prix start.
- Senna's 26th victory; 49th pole position.
- Senna's first Italian Grand Prix victory.
- Next round: Portugal, Estoril, September 23rd.

NON QUALIFIERS

No.	Name	Car	Time
17	G. Tarquini	AGS-Ford	1.28.107
24	P. Barilla	Minardi-Ford	1.28.258
7	D. Brabham	Brabham-Judd	1.28.382
31	B. Gachot	Coloni-Ford	1.28.952

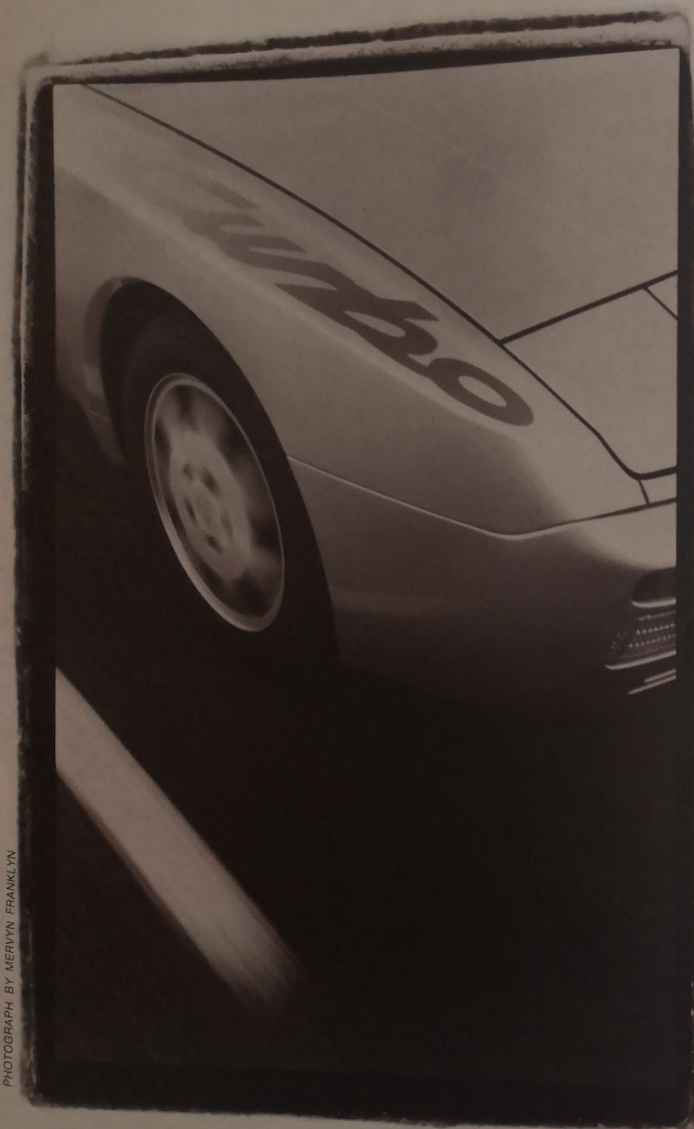
● Brabham's engine blew on Friday and then lost 400 rpm from the engine in his race car.
● Tarquini suffered from fluctuating fuel pressure and the spare was not fast enough.
● Gachot was just not quick enough.

PREQUALIFYING

No.	Name	Car	Time
14	O. Grouillard	Osella-Ford	1.26.947
31	B. Gachot	Coloni-Ford	1.27.594
17	G. Tarquini	AGS-Ford	1.27.773
18	Y. Dalmas	AGS-Ford	1.28.182
33	R. Moreno	EuroBrun-Judd	1.28.703
34	C. Langes	EuroBrun-Judd	1.35.703
39	B. Giacomelli	Life	1.55.244

- Both EuroBruns suffered from lack of testing.
- Giacomelli did just two laps.





car

CAR is Britain's best motoring magazine, the one the others have been trying to emulate for years. No other motoring magazine can offer its blend of high quality writing, excellent photography and attractive design. Its new car coverage and international news are unrivalled, and so is its ability to 'scoop' secret new models – sometimes years before the manufacturers want you to know about them. So whether you want information on your next new (or second-hand) car, or just want a good entertaining read, CAR is the magazine to buy.

The only one you need to read

STRAIGHT LINES

THE DEREK WARWICK COLUMN

Japan and Adelaide have come around again and I feel like I have been through 100 races this season. It has been a hard year – perhaps the hardest of my career – but by the time I hit town in South Australia it will all be behind me. Ending the season in Aussie is a great way to burn out the frustration of the year – and I hope to follow it with a holiday before the work starts again for 1991. Suzuka will be tough for us. The problem with the Camel Lotus has been its handling through the fast corners and Suzuka has enough of those to make life very difficult. Don't expect too much in Japan but in Adelaide it should be very different. The people, the life, everything about it appeals to me and that always boosts the effort I put in on the track. I only hope the weather will be drier than '89. I don't fancy racing on the world's biggest ice rink again.

As I said, it has been hard this year. Take the Belgian Grand Prix for example. Martin and I worked very hard in qualifying and the best we could do was 18th (me) and 22nd (Martin) on the grid. We tried a lot of things but the car's handling was just awful, it had massive understeer. Starting that far back at Spa means if anyone

makes a mistake going into the first hairpin at La Source you are going to run straight into them. And that's exactly what happened. Piquet tapped Mansell up the back, somebody hit Martin and he had nowhere to go but into me. Chaos! I jumped into the spare and luckily there was another re-start and Martin got back into the race in my old car. As if that wasn't enough my engine developed a misfire through right-hand corners. What a day. I finished 11th but it was thankless work. I always give 100 percent but sometimes you have to ask yourself if it is worth it.

Before that in Germany I had really been determined to go for it. I don't think anybody was driving harder than I was in qualifying. The in-car camera showed my fastest lap

which was three seconds off the front row because the car and engine couldn't do more – and Riccardo Patrese said that for the effort, and risk, it looked at least a second faster than Senna's best. A fortnight later in Hungary I was 11th on the grid and got to fifth by the finish. I really enjoyed the race. It is almost a street circuit like Adelaide and I had brake problems from about half way. At one corner the brake would be very hard and at the next there would be nothing there at all. Imagine that in Adelaide! Anyway I came away with two points – our best result of the season so far.

I must admit I'm feeling a bit sorry for myself at the moment because, to put it mildly, things aren't going too well at Camel Lotus. We've picked up three points in 11 races and the target we had set ourselves for the season was 40! Just before the Belgian Grand Prix we tested the new stiffer chassis Lotus. The car has not been handling well in the fast corners and we had built ourselves up to the feeling that it was the chassis. Even through the problems in qualifying, when I was really not sure what to try next to make the car better, I kept looking ahead to that test at





Teammate Martin - back-to-back tests in his car and mine!

(Dominique Lenzy)

Monza thinking we had the solution and I just had to wait for the new car. When it came it was worse than the current car and we realised we had been wrong. The stiffer chassis was needed, but it just put pressure on another part of the car which was obviously the weak link. I have never felt so low as I did then. What can you do? Monocoques take time and money to build and develop, the season is getting on and all eyes are turning to next year already. There would be no point in building another version just to pick up a few points in the last race - even if we had enough time. Lotus face a tough time pulling things together for next year but I really hope they achieve it because there are some great people at the team and they deserve some success. It takes as much effort to be 15th on the grid as it does to be on pole position.

I hope Peter Collins and Peter Wright, the team's new marketing consultants, can help turn everything around. I haven't worked with either of them but I hear good things about them both. Most people - especially his fellow Aussies - will remember Collins from his Benetton days.

"Formula 1 is a business. Camel need results which we haven't been able to give them..."

I must be honest and say I don't blame Camel for moving to Benetton and Williams. Formula 1 is a business. Camel need results which we haven't been able to give them this year and it makes complete commercial sense to do what they have done - especially when you consider their major Formula 1 rival, Marlboro, is doing so well. It is all credit to them that they have stayed with Lotus for four years.

Where does all this leave me - with another awkward decision to make about my future. I will almost certainly have made up my mind by the time you read this but as I write in late August I have given myself until the time of the Spanish Grand Prix to decide where my future lies. I have had a few good offers from sports cars - some as good, financially, as I get in Formula 1 - but I have a lot of things unsettled in Grand Prix racing, money is only a small part of it. I have yet to win a Grand Prix but I know, given the right machinery, I could do that now. I'm driving as good as ever.



(Dominique Lenzy)

company in the UK. Funnily enough my contact with the company was through sponsorship earlier in the year and it was really a case of 'I liked the product so much I bought the company'. It will be based at the new Honda dealership I am opening in Southampton in November. It's the first one for me on the mainland - and it will be one of the biggest Honda dealerships in the UK. We are employing 25 staff and we are now looking at two other dealerships on the mainland.

But that's all in the future. Right now I am 100 percent committed to sorting out the remaining F1 races this year and being in Formula 1 in 1991 so that I can talk to you about what is happening right at the front of the grid. It hurts that I haven't achieved what I know I am capable of. Don't talk to me about retiring, I can't stop. Formula 1 is my life and I know I can do a great job with the right equipment....

PE



Talking shop with my former team boss Jackie Oliver
Can't blame Camel for moving on

(GAT)



(GAT)

I've got some interesting offers from Formula 1 teams so what I'm doing now is trying to decide which way to turn. Because I'm 36 some people write me off and that annoys me. I know I am bloody quick. Remember my Lotus predecessor Nelson Piquet and the way people wrote him off last year at Lotus? This season he has only failed to finish in the points twice in 11 races and is now worth his weight in gold to Benetton. People talk about age and performance - Piquet is two years older than I am, but it has had no more effect on his performance than it does mine. I have to admit for the first time in my life feeling annoyed at the trend of teams going for 'fashionable' drivers. Ivan Capelli was flavour-of-the-month in 1988. Things went downhill at Leyton House and nobody could spell his name last year. Suddenly, after a couple of good races, he is back in favour again. His talent didn't disappear - it just hadn't had the chance to shine. He deserves the reputation he has now - why couldn't people see that even when things were not going so well?

With the team problems, the racing, testing, talking to other teams and my own business commitments things were very hectic towards the end of the European season. I felt guilty that I hadn't spent more time with my family. The day after Spa I went to Birmingham to watch my brother Paul in the F3000 Super Prix then I was at Monza testing on Tuesday, Wednesday & Thursday and then I have a commitment for the power-

boat championships in Guernsey in early September. That was fun because I combined business with pleasure and watched both my girls competing in the horse trials.

After all his problems in Formula 3 this year things seem to have turned out well for Paul now because he is driving for Leyton House in Formula 3000 and they are very professional. I would love to see things start to happen for Paul. I would get a buzz out of that and if he made a couple of giant leaps in the next couple of years then I would seriously think about giving this all up and concentrate on helping him. By that time my business will be quite large and I will have my hands full. I have recently brought ProDrive - a big golfing equipment production



Capelli - emerging from the shadows again

Piquet - a man to keep your eye on once more

(Alister/Pascal Bonduan)



(Alister/Pascal Bonduan)

Shortly before the controversies of Hungary and Spa, David Tremayne heard Ayrton Senna express his own philosophy halfway through what seemed a happier, more relaxed year for the combative Brazilian. What David discovered throws new light on the Senna psyche - or does it, in the light of recent events?

Ayrton Senna is changing. There is about him these days a markedly more relaxed air, and it isn't all simply because he and Alain Prost no longer share the same working environment. 1990 has so far brought him as many problems and disappointments as it has victories, but he has borne the former with a calmness one would not have expected a year ago.

The winter war with FISA taught him a lot, brought home forcibly that, whatever the rights and wrongs of a situation, there are times when it is better to walk away than to fight. FISA's actions brought to a savage end the most acrimonious season in Grand Prix history, and it took him a long time to come fully to terms with the situation. He admits that his motivation dwindled. Yet now there is a veneer of relaxation on the burning intensity he has always exuded.

He and Gerhard Berger get on as well as any team mates can, and within McLaren the atmosphere on a personal level is much more relaxed, even if the competition on the track has raised the tempo of the racing battle another couple of notches.

"There's no comparison basically with last year, and there's not much point in going into detail," says Senna, who is more interested in looking forward than back. "I look at what I have now and feel comfortable. It's completely different, with a relaxed atmosphere, and there is no pressure inside the team. Gerhard and I get on extremely well. On the personal side he is very easy-going and there have been no problems at all."

Probe a little harder, however, and some of his deeper-rooted feelings come a little closer to the surface.

"I believe I paid a high price for keeping silent last year, for not giving my version of the facts." After I'd written a pre-British Grand Prix interview with a particularly outspoken Prost, Senna had asked with an edge to his voice: "Who wrote that?" When told, he gave me the sort of look tough-guy actors use when they are playing the avenging hero on the silver screen. It was as if a mental card index had been endorsed with another black mark against my name.

Win or Bust: Has Senna Really Changed?

by
DAVID TREMAYNE

"I was just not prepared to spend the time and energy talking about the situation," he continues. "I would rather instead spend it on my driving. That's why I didn't go round giving my versions."

He believes as passionately in the veracity of his own feelings as does Prost, but their views are destined forever to be irreconcilable.

"I believe these things are very unpleasant, but nothing that is not consistent can stand for a long time.



Time and circumstance will bring it clear eventually.

Didn't victory bump-start his motivational engine?

"No, not even that could do it. I went away for a fortnight and thought very hard about my situation. It was only in Brazil, when I faced the challenge of driving at home and could see the enthusiasm of all the people, that it came back. That gave me the pleasure, let's say the fire, to get in the car again."

A year ago he would never have exposed such a potential weakness to his rivals, for he of them all knows just how psychological F1 can be.

There was a moment in Interlagos when Prost attempted to shake hands and bury the hatchet. Wounds go very deep with Ayrton, though: despite his Biblical beliefs he refused to turn the other cheek. The two remain as far apart as ever, and did so literally as well as figuratively on the victory rostrum. It takes a hard man to sustain such dislike for anyone; most hatred dissolves eventually. Senna, however, is not as hard as his sometimes gruff exterior suggests. I will remember feeling almost sorry for the remote figure in the Silverstone paddock during a pre-British Grand Prix F3 test session, and went away from interviewing him with a mental image of a very lonely man who couldn't quite understand why people thought him arrogant and aloof.

He is the first to tell a story against himself when the subject of his recent negotiations with Ron Dennis is aired.

Dennis says he is the toughest negotiator he has encountered in F1, but Ayrton laughs at the suggestion.

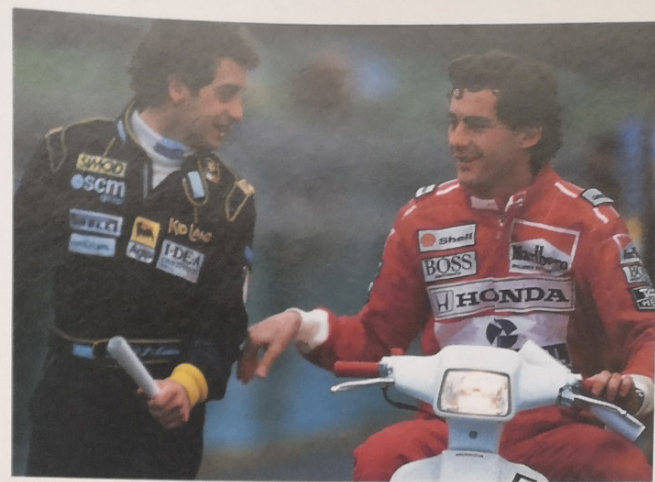
"I'm not that hard if you consider that three years ago when I was negotiating with him, when we got to a difficult moment right at the end regarding a figure, instead of going for it and pushing really hard, which I could have done had I really wanted, I took a chance just to let it happen whichever way I threw a coin. It cost me one and a half million dollars! At that time I had a position where I knew there was a project" (Honda engines) - "I was part of it - and there was no way for it to happen without me. Ron knew that but probably didn't realise that I was aware of it too, and how much it depended on me. I took his suggestion because I was looking forward to the future and the relationship and the right atmosphere, and it was getting to a head-to-head situation. I had my mind on a certain figure but I just said okay. I didn't have to. So we threw the coin."

"I think that shows in practical terms that as hard as I can be or as hard as I can show sometimes, I'm a lot easier if I feel I'm dealing with the right people. I can be very hard where people are pushing, pushing, trying to get something over me. Then I can be very inflexible."

His negotiations occupied a lot of his time, as he probed every avenue. "What I did was try to evaluate the different opportunities that were available for the future in order that I could make the best decision. I looked in different places to see what was on offer. I tried to learn different things in different places. It was very time consuming. But it was necessary so I could make the best decision. I didn't want to wait too long to make a decision because it takes time and it took away my concentration from what I should be doing on the track."

"It had to be a completely open situation; I had to consider everything. And given the situation where the competition is so open right now, where there are three or four teams, you have to go deep into it, and see which is going to be able to provide the best ingredients. More than ever my search is for the winning possibilities, but also, given what I have learned throughout the years, with different teams, situations, negotiations, I have a good feeling for what is the market. I feel very strongly and very clearly what I can get, anywhere."

"I was looking for the environment in which I can make a step forward in terms of learning, in particular on the technical side, where there is a



Lightening up: Ayrton shares a joke with Pierluigi Martini

German rostrum, with Berger: the third man was Nannini - wonder how he's feeling now?





challenge, and I didn't think I had to commit myself to the long term. I wanted the opportunity, almost year after year to change direction if I wanted to." In Belgium it was announced he had got his way: a one-year renewal at McLaren with some "very complex" clauses not made public.

He still sees scope for improvement in his make-up as a driver, and says "I would like to advance a lot more. It is a question of having the right opportunity to do so. More so than ever it is the team work where you need everything within your ability to reach using the structure to improve and make it better. It's an exchange of information."

That he has changed is beyond question, but that change has had some remarkable effects. Now, he says, testing bores him.

"Now I don't have much motivation for all the testing we have to do," he admits, "all the fine tuning. Sometimes I find it boring. I used to like just sitting in the car and just going round, but now I really only like to do it when we have things to evaluate. Going round, there is enough of that to do in a race distance on Sunday, and it takes so much energy, at least for me, that I really don't like to throw this energy away just going round and round."

Without doubt he has made the decision to carry on for some years yet, after considering retirement during the war with FISA, and since Paul Ricard a new shrewdness has been evident. There, in qualifying, he elected to continue running in race trim rather than trying for a record 47th pole on Saturday afternoon. In that race, and again at Silverstone, he had to drive tactically rather than dominantly, and each time his canniness was rewarded with four points. It was, perhaps, a sign of ultimate maturation, the first letting go of the win-or-bust mentality.

"If you look at the number of years Prost has been in Formula One in good teams, I still have a lot of years to go," he says. "What is important is doing your best every single time, and to get results from doing that. If you look over the past three years I have won more races than anybody. That is the motivation factor, that is what I'm looking for. I may be doing it for the next year and things might change and I don't do it anymore. Or I might be doing it for another two years, I don't know. I only do it for the pleasure of doing it and no other reason. Once the pleasure goes I'll have no reason for doing it."

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Letting Go?

Memories are short: it's less than a year since Senna was roundly condemned by FISA for a record of "dangerous driving".

At the Hungaroring this year, as David Tremayne's race report described, Senna got rid of a difficult opponent - Sandro Nannini - by the simple expedient of driving him off the road. No protest was lodged: Nannini said simply it was something he wouldn't forget.

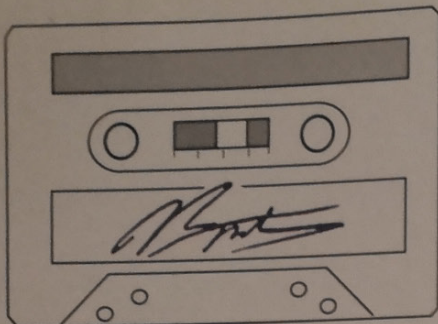
At Spa, both McLaren drivers' on-track conduct was the subject of discussion when team manager Ron Dennis was spoken to by the sporting authorities. Senna seems to have struck sparks again: does a leopard ever change its spots?

(Above) Paul Buckle

Hungary: Nannini's been nudged, but Boutsen won't be beaten

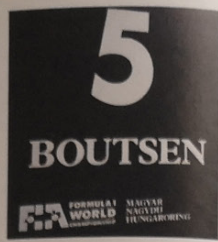


PE



T.B. Talking

Hungary
for
Victory!



That Budapest victory came just at the right time, why deny it? It was the way it was achieved I found particularly pleasing: in front from start to finish, from pole position on the grid. Just as we're getting down to basics where driver moves are concerned, a high-profile result was especially welcome. Some people who had counted me out a bit too soon were wearing embarrassed smiles on the evening of the Hungarian Grand Prix!

To be honest, I didn't really expect it. The outcome of the German Grand Prix, where our cars were uncompetitive in relation to the McLarens, Ferraris and even the Benetton's, was hardly encouraging. Since the start of the season we have tested the car extensively but found it increasingly difficult to find improvements. Since we have been racing at the faster circuits - Mexico, Ricard, Silverstone and Hockenheim - we appear to have lost ground on our rivals. After the German Grand Prix I had ten days in the country with my wife and son, with not even the hint of a private test session. For the first time since the Brazilian Grand Prix I had the chance to draw breath, take a rest and recharge my batteries. Tiredness builds up, inevitably, and taking a little mid-season break is no idle luxury. Despite that, I wasn't in particularly good humour when I got to Hungary. I couldn't share the happy optimism of my friend Riccardo Patrese, who was sure he could repeat his 1989 showing on the twisty Hungaroring. I wasn't so sure, and the outcome of the first day's practice showed I was right.

Next day, to general astonishment, I claimed the first pole position of my career! How had such a dramatic turnaround happened? Let's say I was handicapped on Friday morning when a bad vibration stopped me working properly on the setup of my car. In qualifying I had

problems with traffic, but the car wasn't working too well. In Saturday morning's free practice session I went out first on full tanks, as we always do. The Renault engine was right on song, with its broad power band and excellent torque, and the V10 was picking up beautifully out of the slower corners. On the chassis side there was still some troublesome understeer in the middle of the corners, which forced me to accelerate a little bit later than I would have liked, but the engine's strength made up for that slight disadvantage. Our Williams-Renaults were still behind the McLarens and Ferraris in the pecking order.

Before qualifying Bernard Dudot explained



(Dominique Leroy)

to me that we would have new, special settings for our RS2 engines in the afternoon session, while our associates at Elf were also supplying a new, high-performance fuel. You must remember that Formula 1 is a test bed for the fuel people too: Elf are up to the 19th development stage of their fuel since the start of the season, always, of course, strictly within the limits (102 RON) set down in the regulations. Anyway, as soon as I engaged first gear to leave the pits, I felt the increase in power at once. On my first set of qualifiers I had a touch of the same gear selector trouble that had hampered me in the morning. Then, on the second set, I concentrated hard on keeping my gear changes smooth, which probably cost me a few hundredths here and there but, all things considered, it was a very good lap, on which I didn't have to pass a single car - and that's unusual for Budapest.

With the help of the Renault V10's horses, I knew I'd pulled off a cracking time, and that was immediately confirmed by my dashboard reading. My engineer David Brown was yelling over the radio "That's the pole, you're on pole!" There were still 20 minutes of practice left, with most of my rivals still to make their second run. I waited patiently in the pits, still strapped into the cockpit so as to be able to go back out quickly. My time was there for all to see at the top of the Olivetti/Longines monitor: 1'17.91. Quarter of an hour or so from the end, Riccardo went round in 1'17.95 - a close-run thing! I'm convinced it was in that precise moment I won the Hungarian Grand Prix. Taking pole position on that track is half the battle. Then you need to make a good start, in a car that is both reliable and consistent.

It was my first pole position, after 114 unsuccessful tries. And, with one

or two rare exceptions, it was also the first time I had had a car capable of putting me on pole. Being first on the grid is obviously a real trump card on the Hungaroring, as it is at Monaco, because the track is so narrow, the straight too short to pass anyone fairly in normal circumstances. So my fate was in my own hands: I had to make a clean start and control the opposition while making absolutely no mistakes in my driving. If I got both of those right, I knew victory would come my way.

That pole position was very satisfying, of course, not only because it would help me so much in the race, but also because it allowed me to set the record straight! I have to say that for months the atmosphere in the paddock has been clouded by all sorts of rumours about driver moves for 1991. I was really pilloried for that unfortunate off in Canada; when I got to Mexico, I realised that most on-lookers already felt my place was gone. I found that a bit hard to take. Within the team itself, Frank Williams offered me no reassurance. All right, I'm a professional, I know the rules of the game. But in the circumstances I'd have appreciated just a little bit of support. It went on that way all through the summer. Some people found it just a bit too easy to blame the drivers for the Williams-Renaults' lack of performance on the quick circuits, as they did with those never-ending brake or gear selection problems. Throughout a very trying period Riccardo Patrese and I stuck together, because we're both in the same boat. He was just as disappointed as I was in our bosses' lack of confidence: after 14 seasons in F1, he's had enough of going through the same thing year after year. But we stood firm, and put in test day after test day without complaint.

In Budapest, my pole position was taken for granted: the fact that we were on the front row simply meant the cars were good. And the latest rumour was the double signing of Alesi and Senna for 1991! So I knew where I stood. It hadn't escaped me that defeat in the Hungarian Grand Prix (unless there was an obvious mechanical failure) would be put down to the driver. I haven't fluffed a start since the start of the season: and this one, clearly, was crucial. I didn't get away badly, but not too brilliantly either, and I had my work cut out to stop Riccardo slipping through on the first corner - especially as Berger was trying his luck on the outside! I'd done the hardest bit. My car was working quite well, and I took care



In F1 timing is everything...

...and in Hungary mine was perfect!



(Alison/Pascal Renouard)

not to be too hard on my tyres, as I had no intention of risking a stop. Berger never really had the chance to attack, nor did Patrese. Nannini might have been a danger, but he was sidelined by Senna and in the end Ayrton was the only one to try a passing manoeuvre, at the end of the straight two laps from the end. As you can imagine, it was too close to home for me to give him the hint of an opening!

I was very happy, because it was a victory I deserved: and this time, no-one could gainsay it. So I savoured it to the full. Not vengefully, that's not my style, but it was a welcome time to dot the t's and cross the i's. There could be a riot at the end of the month when we go to the Belgian Grand Prix at Spa-Francorchamps! I hope I can be in there fighting for pole and victory again on a track I love so much. Next it's Monza, where we had three days' preliminary testing, then on to Estoril

and Jerez, two tracks that should suit us nicely. Winning is a nice feeling: I'd quite like to carry on...

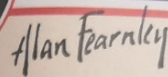
NO MAN IS A PROPHET IN HIS OWN LAND

After my win in Hungary I scarcely had time to draw breath. The following Wednesday we were at Monza for three days' testing prior to the Italian GP. I went home to Belgium the weekend before Spa and - as every year - it was a hectic week. But all those calls on my time are reasonable enough, and I did my best to play fair with media, sponsors and friends. It's amazing the number of friends you find you have when you've just won a Grand Prix and the next race is on your home ground! I found all the good wishes very touching this time

The race itself was on the frantic side. Three starts are just too much, and when that happens, on such a fast track, you must take absolutely no chances. In the first start I held station, no more than that, and the pile-up happened behind us. Second time we got the green light, Gerhard Berger didn't get away cleanly and crossed the track to block Alain Prost; I took advantage by nipping round the outside and taking second spot behind Ayrton. Sadly the red flag was out again a few minutes later...

It's public knowledge that Ayrton and Alain re-signed for their respective teams during the Francorchamps weekend. Lucky them! Of course that will make things a lot clearer on the transfer market, and we should all know what we're doing soon. That will give us the chance to finish the season off in the best possible way, with real hopes of success for the Williams-Renaults, especially at Jerez and Adelaide, two circuits that should suit us very well.

PE

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AUTOGLASS

It's race morning, the drivers have had their warm-up session and Frank Williams is ready, in his own words, 'to go to war.' Williams has been warring with the best of them for more than a couple of decades and winning battles for half that period. Still, though, his thirst for victory is not satisfied.

"I'd like to win everything and not have to work for it, but life's not like that," he says with a smile. I doubt he really would like it that way. He'd miss the war, he'd miss the race. Frank is, and always has been, a man of war, a racer.

Williams Engineering's Didcot factory is a magnificent, high-tech facility, complete with conference centre and museum. Such is the scale of modern Formula One.

And yet the spirit is essentially that of the raw, audacious team, camped in a humble workshop; it is the spirit of the aspiring boss, a spirit undiminished by success or personal tragedy. The spirit always emerges in conversation with him. Frank by name, frank by nature. He cherishes the experiences and associations of the early days; the first victories, the first Championships. But he refuses to drool over them. He even declines to bemoan the lack of an Alan Jones on the current Grand Prix scene.

Instead, he says: "I don't because, great as Alan was, as Keke Rosberg was, and as much fun as they were, I very much believe in 1990 and what

Complicating the issue: Patrese proves himself a front-line driver again by winning for Williams at Imola

Williams: Frank by Name, Frank by Nature

by
DERICK ALLSOP

the situation is today - and tomorrow.

"Things as they are today have no relevance to any other era. Sure, I may talk about Alan and the times we had, but that's 10 years ago and a fond memory, when I was younger and we were contemporaries.

"What is happening, and which I can do nothing about, is that the age gap is increasing every year. I'll soon be the grandfather of the pit lane. Some day they'll wheel me away and that'll be it."

That, I fancy, won't be for some time. At the age of 48 he is scarcely a pensioner and from his wheelchair he probably has a better perspective of Formula One - and life - than anyone in the business.

He goes on: "The general driving ability is there. There have to be 20 potential champion Formula One drivers in China, given there are a billion people there. They'll never come out, for obvious reasons, but there's no reason why they shouldn't be there.

"There is no doubt in my mind that the current crop of drivers are as good - no better, no worse - than the crop of a decade ago or the crop of two decades ago. No reason why they shouldn't be."

Williams has been at the centre of considerable driver speculation this season. There was a widely held belief that in Thierry Boutsen and Riccardo Patrese he had two good, solid men, but that neither ranked as a genuine, front-line driver.

Ferrari had Prost and Mansell, McLaren had Senna and Berger. To get the very best out of the Williams Renault and compete with those two teams they would surely have to make at least one change to their driver line-up. The activity in and around the Williams motorhome indicated that Frank accepted as much. Renault were certainly keen to sign reinforcements. In their eyes the ideal pairing would be Ayrton Senna and Jean Alesi. The

former they rated the best in the world, the latter a Frenchman with the potential to perhaps become the best in the world.

There was, though, another name on Williams' shopping list: Nigel Mansell. When the circus was at Silverstone, for the British Grand Prix, Mansell was seemingly on the verge of re-joining his former team.

Williams, however, were not prepared to commit themselves because Senna had asked for more time to consider their offer. Senna, clearly, was their No. 1 choice. Mansell did not appreciate being No. 2 choice and, already disillusioned by events at Ferrari and under pressure from his wife, announced his retirement from Formula One a couple of days later.

Williams came in for a lot of criticism over his handling of the affair yet refused, at that stage, to give his side of the story. He is not, though, a man to bear grudges and, unfair as he thought much of the criticism from this pen, he willingly gave his views on Senna and Alesi.

On Senna: "He's worth an awful lot. Just look at his results. He looks to be perhaps the best driver at the moment." Somehow I got the impression an alarm bell was sounding in Frank's head as he quickly added: "He's ONE of the best, there's no question. He's very clever, very skilful, disappears in the wet. He's obviously outstanding."

But what about the occasional mistakes? I asked. Jackie Stewart, for one, maintains those mistakes still separate the Brazilian from the very best.

Williams: "I never planned on being an expert on drivers, to criticise them, to dissect their performances etc. etc. We're going into an area where I can make a general remark, but Senna has never driven for Williams, so I can't give you chapter and verse on him.

"In any case, when you have unresolved business matters, never mind with whom, it's bad business to talk about them. I'm very reluctant to be drawn on any driver because it smacks of being an expert and waffling on." Without waffling, then, what about Alesi? "What he's done is he's gone very quickly as soon as he's come into F1. When he was under pressure in the early races, on the street circuits, he never made a mistake."

"Though I'm not aware of his day-to-day situation at Tyrrell, from the outside there seems no doubt about the pressure on him more recently. What you have to say, however, is that he's going to be very good."



Inspirational figure: Frank with Philippe Streiff

What does Williams look for in drivers? "How fast they are, what their potential is and how clever they are."

Experience? "The words 'clever' and 'experience' generally go hand in hand. Experience means not being prone to making mistakes, being prone to making the right tyre and set-up choice for the race. That is normally down to experience and a good intelligence quotient."

At the Belgian Grand Prix we learned that Senna would, after all, be staying at McLaren for another year (perhaps then to take over from Prost at Ferrari in 1992); it seemed Alesi would be the likely newcomer.

All through the speculation, the rumours, the claims and counter-claims, the Formula One paddock more or less took it for granted that Boutsen would be the man leaving Williams. Yes, he'd had a couple of seasons in the wet during the 1989 season, at Montreal and Adelaide, but

he'd hardly taken the job by the scruff of the neck and had generally not been as fast as his rejuvenated partner, Patrese.

So then what did the Belgian do? He earned the first pole position of his Formula One career in Hungary - beating Patrese into second place on the grid by a whisker - and led the race throughout despite ceaseless pressure and occasional mayhem behind him. It was a masterly performance, a study in concentration, nerve and judgement. What's more, he was up to fourth place in the title table.

Boutsen, long linked with the Arrows-Porsche venture, had just been saying he didn't wish to leave Williams anyway. At the same time Ken Tyrrell was doing his best to keep Alesi.

Every twist and turn in the tale - and a few more imagined twists and turns - made new headlines around the globe and no doubt drew groans from the likes of Williams. The annual



(Allsop/Pascal Rondau)

driver market has become a major production, stretching almost the length of the Championship season itself.

"That's the business," says a resigned Williams. "It's because there's so much money involved the business has mushroomed. The stakes are higher and it's very much harder."

But aren't driver salaries reaching absurd levels? (Senna, for instance, was reported to be seeking \$12 million for a one-year contract). Again, a resigned Williams: "Market forces. But even if you have the two cheapest drivers in the world you are still talking about a vast budget - if you want to win.

"It's very difficult to win, but then it was 10 years ago. Racing has, though, been quite a bit better for a number of years. It looks closer and the closer it gets the better. The business needs that."

Honda Marlboro McLaren are still the team to beat, but Ferrari and Williams Renault have demonstrated that, on their day, they can do it. Benetton Ford have found an extra stride. Tyrrell are gaining fresh hope, Leyton House, too. Can more teams join the big league, or will the rest be left stranded in a second-class society?

"I can't predict who's going to go well in the future but the trend suggests it will get tougher. Everything is possible, everything can change. With more people coming in with multi-cylinder engines it will get tougher still. The gap will close, no question about it.

"You will always, though, have people struggling to keep pace and compete. It's always been the case, in the 22 years I've been in Formula One. There are big guys, there are middle guys and there are little guys.

"It's the same in any sport you care to talk about. Football goes from Division One right down the scale. In athletics you have guys who are world class and others who never will be. It's the way life works.

"Being competitive is being competitive. It's costly and you have to

work at it. It's hard. You go to war every fortnight and do your planning in between. We have a good partnership with Renault. They do their share, we do ours. Yes, I'm very pleased with it."

The irony of that partnership will not be lost on those who remember some of True Brit Frank's comments about Frogs during the FISA-FOCA conflict a decade ago. When I drove up in my Lancia for my first interview with him he harangued me for owning a foreign car. I reminded him of that day when he signed up with Honda! "Ah," he responded, "but the car is still very much BRITISH."

Jones: fond memories, but no point in dwelling in the past



That was one of his easier comebacks. His resilience and resourcefulness shame the rest of us. The spirit endures, but then so does the skill and dedication of the team Frank built. From Patrick Head down, it is a team of quality and vision.

Together they have achieved four Constructors' Championships and provided the machinery, expertise and support for three title winners, Jones, Rosberg and Nelson Piquet.

But for Williams the past, as he says, is a fond memory. His concern is the challenge of the future; the challenge to his team and the challenge to Formula One.

He says: "What we've seen this

year is a really good spectacle. The fields are much bigger, it's more competitive and as a consequence the product is much better.

"It has got a lot of TV and the trick is to keep it. That has to be the aim of everyone involved in Formula One, right across the board. We have a good show, let's show it."

So do we need new stages, in the Far East perhaps? "Bernie goes where he thinks he can get the best deals, where we are best received. He has been doing that, and doing it well, for a long, long time. But sure, the Far East is an obvious area. We need to be even more exposed, no question. Formula One is in demand and we must ensure it stays in demand.

"When you look back over the last 10 years or so it has come on magnificently. Like all things, it's not perfect. There's a vast amount to do, but there is a lot of energy to do it."

There must come a time, though, when any individual at this level begins to run out of energy, be it physical or mental, and decides enough is enough. That time has most certainly not arrived for Frank Williams.

He says, with absolute conviction: "I still have the commitment, the will to go racing. I have the same determination to qualify well, the same feelings

through warm-up and through the race itself. Yes, the desire is still there.

"I suppose I'll continue until I get too old to go racing. As long as they lift me up and carry me around, and I don't get too much of a pain in the bum then, sure I'll carry on. I love racing, everything about it. Always have done. It's as simple as that, really. I just love racing."

PE

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Racing Ahead



53 Grand Prix Wins



Unit 22, Business Park, Albert Drive, Sheerwater, Woking. That is McLaren's address. It is hard to associate a business park in that drab part of Surrey with the high profile and all-conquering Formula 1 team which so emphatically dominates this multi-million sport. Unit 22 is immediately on the left as you come in. Dark glass panels cover the length and height of it. At the top left hand corner the company's name, in that distinctive day-glo red. Inside there is a young lady, a phone, a computer, an open stairway. Everything is grey. Dark, light and shades in between. You're told to wait in the reception area, to the left. And that is when you're poleaxed. There are seven Formula One Grand Prix cars all lined up. In the reception room.

The first is Alain Prost's, the one he won the 1989 World Championship in, then there is Ayrton Senna's and another of Prost's and further on there is Niki Lauda's car. If it is meant to impress visitors, it works. So effective are the red and white cars in this sea of grey, that it takes a while to register the walls lined with cups and trophies, all 250 of them, testimony to McLaren's phenomenal strike rate.

"They are there to impress, but not so much the visitors, rather it's for the people working here," says Ron Dennis. "They never see the cars complete, they're always in bits, and they can lose sight of why they are working so hard. So now they can see these cars, the best from each year. Each of those has the engine, gear box and the suspensions they had when they crossed the finish line and won either the World Championship or the most races. These cars have pedigree."

Ron Dennis is the Team Manager of the Marlboro McLaren Honda Formula One outfit. He is also co-owner of McLaren International, the racing team he bought outright, together with Creighton Brown, now in charge of the sports-car project, and John Benetton. He is 42 years old, married and has a daughter. His office is, yes, grey and

Grey Areas: Ron Dennis in his own Words

by NORMAN HOWELL

uncluttered. On his desk only a diary, on his walls three abstract paintings, one of them a Miro, a collection of microscopes in a cabinet, and some brightly coloured glass vases resting on shelves directly behind him.

"The vases are a hobby of mine. I keep hearing how it is only the Italians and the French who are capable of

producing art and style. But these are English, they are beautiful. I collect them wherever I can." This, and the Miro, are a somewhat surprising side to a man many find aloof, and difficult to talk to. Hard to pin down at race weekends, his intent expression combined with the team's clinically efficient pits and motorhome, contribute to a certain aloofness about the whole set-up. What comes through is a strong feeling of team spirit, but somehow inward-looking.

"I think the expression 'team spirit' is an undersell, because this is all about management and motivation. And to maintain motivation you have to use various tools, and team spirit is one of them. But all of this is hard to keep up especially if you have been successful. That is when complacency sets in, and it develops a downward spiral, a sort of self-destruct process. And one of my jobs is to stop that.

"And yes, we may be perceived as being inward-looking, but we do not measure ourselves by other people's efforts. Our own values and our own goals, that is what matters to us. Yes, we are often misunderstood, people are jealous, because we achieve our goals. But that is their perception, they are trying to judge from outside in. But we are evaluating ourselves from the inside out, that is our strength."

Dennis talks a lot, sometimes using some very convoluted phrases. He is aware of this, he apologises, then carries on explaining his philosophy, which he says is the key to understanding why it is that his team is so dominating. "If you analyse Grand Prix teams, it is surprising to see how many have never won more than five races over a five to ten year period. And then look at the established teams and look at what they have achieved over that period of time. That is when you begin to realise how difficult it is to win. And if you try to work that out statistically, whatever your result, you will have to multiply that by ten to even begin to comprehend what

Ron speaks: not always as direct as his cars



it means to win consistently. And we do."

Dennis' attention to detail and cleanliness are legendary, but what about those factors that cannot be worked out on a computer, what about the problems he has had with some of his drivers?

"I was not pleased with my performance in 1989. I don't want to open old wounds up. But part of the problem was that we had two people who considered themselves to be number one drivers. But one of them, using the same equipment, went faster than the other. That was hard for the slower driver to accept. He had to come to the conclusion he was second-best, and that is when motivation goes. So he looked for a mental crutch, blaming us. As did some of the authorities in the sport, and that was a total abuse of power on their part."

"... if you scrape all the gloss and the media hype, our biggest asset is our ability to finish."

At the time of the incidents at the Japanese Grand Prix, Dennis spoke a lot about fair play. Did he see himself taking on a different role in Formula One, to maybe bring some fair play into the sport?

"At the tail-end of last season I was angry at myself for being surprised by the lack of support that I had from the other teams. They could have expressed an opinion, but they all saw McLaren on a route of self destruction, happy to see me bleed. Now I have a mental block about contributing to Formula One. Maybe I was naive, but I felt let down. So now I prefer to operate in my McLaren bubble."

It has been suggested that Dennis, who came into motor racing as a mechanic when he was 18, desires Bernie Ecclestone's job, wants more power. "No I don't. He does it well and I am sure he and his organisation get tremendous material benefits from it. But my motivation is winning races, not making money. Our goals are different." Dennis has forged an extraordinary partnership with Honda. He freely admits that working with the Japanese is not easy. There is, he says, a lot of "corporate stick poking", but he is keen to stifle the insistent rumours that want Honda leaving



Is Berger second-best this year?

McLaren. "If the partnership ends, it will be for reasons outside each other's control. I don't think we have any surprises, it'll go on for quite a while yet."

The accusations of being inward-looking, living in a bubble and of conservatism, don't worry Dennis, on the contrary: "We fully recognize the benefits of a driver not taking his hands off a steering wheel when operating a semi-automatic gearbox, but no advantage cancels out the need for reliability. It is very difficult to be conservative, because you must discipline yourself not to change something until you are sure it is going to be for the better. You see, if you scrape

all the gloss and the media hype, our biggest asset is our ability to finish. And if you are competitive when you finish then it becomes consistency and result."

At Silverstone, Ferrari tested the modified V12 engine. Nigel Mansell, the one Ferrari driver there, drove it for about 20 laps and then it blew up. McLaren Honda too tested at Silverstone, Berger and Senna were both driving V10 engines while Allan McNish, the test driver, roared round the Northamptonshire track in a brand new V12. It did not blow up. The Ferrari engine went back into a crate, and back to Italy. Ron Dennis was there and he smiled.

PE

RON DENNIS

- 1966 Apprentice Cooper Racing Co
- 1968 Chief Mechanic for Jack Brabham
- 1971 forms Ron Del Racing (F2)
- 1973 tries to form Formula 1 team, defeated by oil crisis
- 1975 forms Project 3 (F3)
- ... and the rest, as they say, is history!



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A big, tidy and comfortable room, no titles on the doors, a telephone which barely murmurs to announce a call and several piles of paper on a desk. This is John Barnard's office. Even in the unusually high temperatures of Britain's late summer heatwave there is a feeling of coolness, order and purpose. The welcome is informal and relaxed, but the impression is of a man in charge of his own destiny. For Barnard, Technical Director of Benetton and arguably the most talented designer in Formula One, singleness of purpose has been taken for granted for more than 20 years.

Born in London on May 4, 1946, the only child of very supportive parents, Barnard was given and took every opportunity to pursue his interest in cars in general and racing cars in particular. Indeed, it might be more accurate to describe his parents as partners in the development of his career and honing of his talent. When he wanted an Aston Martin, for example, he was given one. And when he decided it needed new upholstery, his mother supplied the needles and enthusiasm for the job. It was a family affair and it gave him, as a teenager, the stability and opportunity to make a clear, strong and ambitious start in life.

"I suppose, going back, I've always been interested in motor cars," he recalled. "Not so much driving them - I've never really had any great ambition to be a racing driver. But I've always enjoyed the technical aspects and I've always played around with them myself, had various projects of my own and so on right through my teens."

"I think it was when I finally finished college and I was about 23 that I started more seriously. I went through college with the GEC group and then, when I started working full-time, I suddenly stopped one day and thought, having done nine-to-five for about six months, Jesus Christ, I can't do this until I'm 65. And at that point I just decided to try and get a job in motor racing."

Benevolent Dictator: John Barnard

by
TIMOTHY COLLINGS

At this stage, the young Barnard, who qualified as a mechanical engineer, was involved in various racing pursuits and car projects of his own. His decision, effectively, was to turn his hobby into his job. He wrote to

One of the major brains behind Benetton's upsurge: JB



various teams and visited McLaren where he was advised he lacked the experience for Formula One and should serve his time in a lower formula. He also received a reply from Lola and went there for an interview with Eric Broadley who took him on in the drawing office at their Slough headquarters.

"Within nine months, I was basically responsible for designing, under Eric's guidance and watchful eye, the first Super Vee cars. The formula was just introduced at that time and these were the days when you did everything."

"You did the clay model, took it away at weekends, worked on it in the garage at home, you drew the chassis and you just got involved in everything. Obviously I was just gobbling up experience and information as I went along."

"It really was a superb way to start and it gave us all a chance to do all sorts of things and get all sorts of experience right through to track experience. Within a year, I was going testing with the thing and it was very, you know, suck-it-and-see then. The position of race engineer had not really developed."

"You drew it, you sorted out problems when things were built and you went along to the track and did whatever was necessary. That's how things worked."

After three and a half years at Lola, Barnard's instincts began to turn toward Formula One and Indy racing. He heard "through the grapevine" of a job at McLaren. He got it and, after working as a sort of number two and on Emerson Fittipaldi's 1974 world championship winner and the Indianapolis-winning McLaren M6C/D his career "just seemed to go on from there." It carried him to Parnelli and on to Chaparral, where his success continued, then Project 4 and then full-time into Formula One with McLaren where Niki Lauda and Alain Prost won three world titles between 1984 and 1986.

Barnard was involved in Formula One with McLaren from 1972 until 1975, of course, so it was not a foreign field. "Those

were the days of the M23, of Fittipaldi and of the Indycars and I was doing a lot on that side too so it all started a long way back," he said. "I went away from it because I felt that having been given a chance to be in charge - as Chief Designer - with Parnelli and to work with a few people I knew from the past, it was a good move."

"So I moved to live in California... I didn't say no, I want to live in England - that was at a later stage!"

For Barnard, California was a special experience and it coincided with his marriage. "I learned so much," he said. "I got a lot more involved on the engine side because they had their own engine shop and we were literally just bolting the turbochargers onto the DSV and we started that programme off."

"I got heavily involved in that to the point of designing a fuel-injection system to go with the turbo-charged engine and doing a sort of pressure-control system for it and so on."

"It was very interesting - working on the engine side and Indy-car racing and I was involved in gearboxes too. We were doing transverse gearboxes in 1976 and all this sort of thing. It was a great chance to do so many different things."

You have to have a good feeling for all the basic ingredients which are required to make a decision - and having got that far you just get on and do it."

For the young Barnard, the switch to motor racing changed his life. All his previous hobbies were gone, swallowed up by his intense interest in his new work. "I just knew that was what I was going to do," he said. "I wasn't old enough to worry about long-term stuff and where was it going and would it all fold up in five years' time, but it was always there. That was always the thinking about motor racing. But I enjoyed it so much."

This was hardly surprising. Both of Barnard's parents were interested in engineering and had encouraged him. His mother was involved in engineering during the war and stayed involved in all her son's projects afterwards. "They were the sort of parents who, really, in some ways, made it all a responsibility. In some ways, any project I was doing, I felt they were there, right there, behind me. They were the crew almost."

"People were amazed sometimes because it seemed that I was directing



Lauda (1) was a driver who pushed the designer on; Senna (12) is another Barnard would like to work with

my parents sometimes. This is the next job we've got to do and so on'. But this was just the way they were. They just wanted to do the best they could. I was the only child and they weren't rich."

when they opened the first few miles of the M1 - when I got up at 5am to go for a thrash in this thing and there was nobody about at all. They were exciting times."

Family support has always been and remains an important part of Barnard's life. In 1975, the year he left for California, he got married. "I'd been going out with Rosemary for 15 months or so and I said I had this chance of a chief position and I'm going to California," he said. "What do you want to do? Do you want to

"Niki pushed the engine side with me"





Fittipaldi's 1974 campaign took Barnard close to the F1 heights.

wait? Or do you want to come with me?" And she said I'll come with you but we'll get married first. And that was it. I said alright and we got married in Belfast."

The decision was taken quickly and followed by equally decisive action in buying and selling homes. In no more than three weeks, all the arrangements were accomplished. Decision-making was swiftly done. "I was always pretty decisive in those days," he recalled. "And 1975 was an important year in my life. You have to have a good feeling for all the basic ingredients which are required to make a decision - and having got that far you just get on and do it."

In his early twenties, Barnard had no specific ambitions to be a technical director. "All I wanted was to do something I enjoyed doing on the design side," he said. "I still enjoy sitting down and thinking out design solutions, but now, obviously, time gets less and less."

"The only feeling I remember having - and to some extent it is still true today - is that all, everything, depends how hard you want to try to get the ultimate solution. When you have a design problem, usually you try to satisfy a number of requirements. In the end, it depends how long you are prepared to go at that and how hard you are prepared to work to succeed. I suppose I am, maybe, prepared to go at it longer and grind at it harder than a lot of other people."

"Yes, as an only child, it could be true I was able to develop a lot of concentration. I didn't have a lot of friends. I had one or two friends I would see a lot, but not a lot I would

see frequently or even intermittently."

He denied, however, that this made him a very serious person. "No, I don't think so. I'm just the sort of bloke that if you drop me on a desert island, so long as I've got things to do and can find solutions to the problems, I am happy. I don't need a lot of people around, you know. Just my family. If I didn't have them around, I don't know. It might be different."

He admitted his chief pleasure is in creating something on his own. "A lot of people require other people's input, or an audience or something, but I don't. It doesn't matter to me. I can do a lot of things which other people would pooh-pooh - like the composite chassis, the gearbox and

...and so would Prost in the early 80's, also with McLaren



all this sort of thing. I had a lot of critics, but that didn't bother me and I have never felt any antagonism toward those people. It was just their opinion and my opinion. I was just their what I was going to do."

With such a strong single-minded approach, had Barnard found it difficult to have lasting friendships in Formula One? "I've still got one or two fairly good friends - I still consider Patrick Head to be quite a good friend even though I don't see him a lot. I feel a sort of kinship, I suppose, with him. We went through the mill together about the same time and have crossed paths a number of times. Basically, I think, you both know you have put the time in and know what each one can do."

"In some ways, the more you go on, the more you can see people coming into Formula One who completely circumvent the route - the three years here and three years there, the long apprenticeship, seven, eight, 10 or 15 years of it. They walk straight in basically having done nothing. But through freak circumstances, they are in the right place at the right time with a label hung around their neck, which they probably put there themselves, and which says 'I am a designer'. I think we both look at those people and think you don't really know anything about it."

Nowadays, having spent so long in the business (including the three years at Ferrari, 1987-1989, about which he preferred not to be questioned), Barnard often finds himself in the role of teacher. It can be a frustrating experience, but, as he freely

admits, it is an important part of the learning process for people to be allowed to make their own mistakes. "You have to give people the chance to learn and bring them on. They have to go through something of the same cycle again that you went through, but at the same time you need to find the middle ground so you don't lose too much design time."

"Sometimes I come along of course and look over their shoulders and think 'you're never going to get there that way.' I just know it is not going to work, but I try to temper that with letting them find some things out for themselves. You have to bring on new people all the time."

Barnard does not share the modern philosophy of design team work in Formula One and believes it has not worked out successfully at McLaren. He said: "You have got to remember that Ron (Dennis) is the commercial side really."

"He is not on the technical side and the fact is that he has drifted over to try and control or take over the technical side or create a technical side that won't give him any problems. But at the same time, he doesn't really understand the technical side in enough depth. He doesn't understand what is required of the people involved in it."

"I've said it before and I say it again that what I think this business needs, like the question of what is the best form of government, is a dictatorship. Providing, that is, that the dictatorship is in the right direction."

Barnard's career has involved him in working with most of the top drivers, but one he has not worked with is Ayrton Senna. Clearly, he would like to if the opportunity arose.

"He is unquestionably the number one driving talent," he said. "His level of dedication is, well... he could in fact put a lot of pressure on you. I think you would always know he was there. It would be useful to have another

person pushing it forward you know. That's my job as well. To push it on. And if there was another guy there like Ayrton, he'd push as much as you would. In a way, it would be good."

"I always felt a lot of responsibility when we had people like Niki on board. He pushed because he pushed the engine side with me. Alain too, in the early days, always pushed. In the first year of working with him, it was always there. The discussions about the car, ways to improve it and the



a number of them, English was easier than Italian. I'd like to have picked it up easier. My wife is a language person and she picks things up."

"She is vaguely interested in Formula One and knows about my business. She knows what I am doing. She would know the grid positions and the race result if I rang home. She'd have turned on teletext to get them." Would he advise his own children to follow him into Grand Prix racing? "No, I wouldn't advise them at all.

Wait and see how they turn out and what they want to do because I think the most important thing for anybody is to be doing what they really want to do. Then, you pour all your energy into it and I am sure you will be successful at whatever level you are happy to stay at to be successful. It is the same if it is horse riding, painting or anything."

And if it is driving racing cars? He laughed. "Well, that's a difficult one. The danger would be a difficult one and I would have to be careful because of the position

I'm in. It would be easy for me to help them. In a way, too easy... I would have to be very careful about that. But I can tell you I wasn't allowed to have a motor bike."

"My mother said if you get a motor bike, I leave home. I knew she wasn't leaving home, so I didn't get a bike. It was straight to cars. I would desperately fight my children from having bikes on safety grounds. I think they are beautiful to look at - but terribly dangerous."

PE

feedback came out all the time. On and off - but all the time."

"And then I have worked with other drivers where you struggle to get it out. With Alain you never have that. It is always there. To me, he is absolutely as dedicated as Ayrton. Ayrton has the image of total dedication, of shutting out everything else for it. And that is coupled with the greatest natural driving talent around at the moment. The two things build a strange image for him."

One of the qualities he admires in both Prost and Senna is their grasp of languages. "I tried to learn Italian," he said of his days with Ferrari. "I he said of his days with Ferrari. I he said and I struggled with it for a started and I never got to the point while, but I could string sentences together. Mind you, you've got English-speaking drivers and a number of different nationalities in the team. For

The B190 is designed by the Benetton-Ford design team, headed by chief designer Rory Byrne, who was also responsible for last year's car. John Barnard, who joined Benetton as Technical Director in late 1989, and his Advance Research Group have helped Byrne and co with the design of the new car. The Ford F1 V8 engine is installed as a fully stressed member attached to the rearmost monocoque bulkhead. A new even better Series IV version of the Ford F1 V8 made its debut at Silverstone. "Compared to the B189, the most obvious change is the overhead airbox", Chief Designer Rory Byrne says. "Because of the regulation change calling for revised dimensions for the roll-hoop, we found it more beneficial to incorporate an overhead airbox at the same time. The bodywork and front wings are new but, generally, we have stuck with the same aerodynamic principles introduced on the B189."

AERODYNAMICS

- 1) The new Benetton B190 has a new front wing in two profiles. The inclination of the secondary flap is adjustable; downforce is finetuned by a trimtab. The layout of the flap follows the modern trend: longer at the end closest to the tyres. The new front wing is less sensitive to ride height than the old single profile delta wing and does not need support by wires.
- 2) The long and curved sidefins have been retained to save the front wing airflow from turbulence from the tyres.
- 3) The bottom of the nose curves slightly upwards, following the underside of the front wing. This generates additional downforce.
- 4) The nose of the car is rather steep and high, which may look less elegant than the previous Benetton F1 cars, but is in fact not very important aerodynamically.
- 5) The front wheel brake duct is made in-house of carbon fibre-epoxy composites. The brake disc is in light weight carbon-carbon composites from Carbone Industries, whereas the calipers are from Brembo. The duct has a smooth surface at the inside of the tyre; this is in order to

Drawing Board: Benetton-Ford B190



by
**PETER NYGAARD
and BENT SORENSEN**

minimize turbulence and obtain lower drag.

- 6) There are several aerals on the car, allowing the driver and pit-crew to communicate, or transmit engine data to the pits.
- 7) A small blister on the right side of the narrow monocoque makes room for the gear selector.
- 8) The sidepods are similar to those of the B189; the air intake is very narrow and high. The pod widens round the fuel tank, and narrows to the rear end; this gives lower drag, due to better airflow round the inside of the tyre. In the left sidepod, there is a big water radiator; to the right, there is a smaller watercooler (9) and an oilcooler (10). The air exits to the very end of the pod, in order to prevent the turbulent airflow from reaching the rear wing. This is an important detail.
- 11) There is a small air intake at the top of the left sidepod, in order to cool an electronic black box (Ford electronic engine

- management) situated at the top of the pod.
- 12) The air intake for the engine is now situated over the driver's head, and has a fully integrated roll hoop.
- 13) The engine cover is very low at the rear end; this calls for small blisters giving room for the arms of the anti roll bar system.
- 14) The high speed rear wing version (e.g. for Imola and Silverstone) is, like last year, in two sections. The lower section has central support, the upper section consists of two smallish profiles, the last step with an exchangeable trim tab.
- 15) The rear wing is supported by wires.
- 16) The rear end undertray curves upwards over the entire width (thanks to the transverse gearbox, situated in front of the rear axle) giving extra downforce and better traction from the rear tyres.

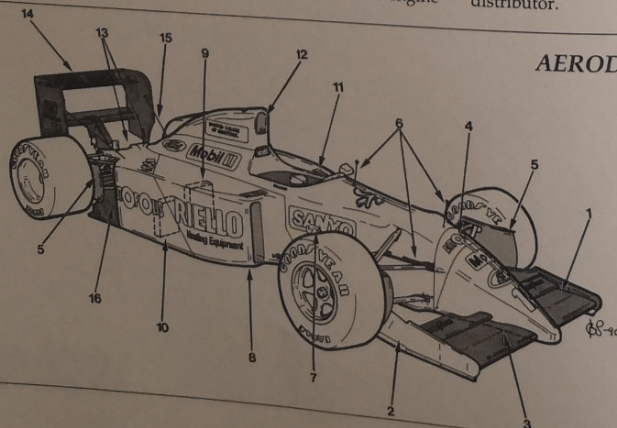
THE FRONT SUSPENSION

- 1) The asymmetrical push rod front suspension of the B190 is similar in concept to the front suspension of the 1987 Benetton B187. It is designed to accept the active ride system, currently being developed in cooperation with Ford Electrical & Electronics Division.
- 2) Two coil spring/Benetton damper units are situated asymmetrically inside, crossing each other and bolted to the opposite side of the monocoque. The resultant small holes do not weaken the monocoque significantly.
- 3) Fabricated rockers are also mounted asymmetrically to machined bulkheads (4) bolted on to the top of the monocoque.
- 5) The compact anti roll bar, which is loaded in bending (and not in torsion as most anti roll bar designs) interlinks (6) the rockers (3).
- 7) Gas cylinders, connected to the dampers, are mounted inside the monocoque.

ENGINE, GEARBOX AND REAR SUSPENSION

- 1) A special interior carbon fibre airbox feeds air on to the 3500 cc V8 (75°) Ford Cosworth F1 engine, which produces well over 600 bhp.
- 2) Ignition coil, connected to the current distributor.

AERODYNAMICS



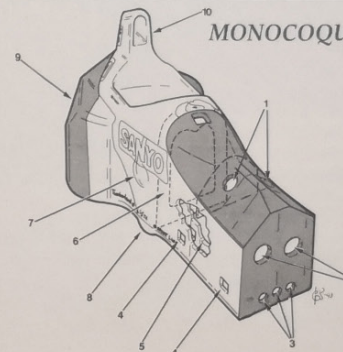
- 3) The 6-speed Benetton gearbox, which is situated in front of the rear axle (in order to obtain better weight distribution and to allow the undertray to sweep upwards over the entire width) was introduced last year on the B189. Only minor alterations have been made to the transverse gearbox this year.
- 4) The engine oil tank in the bell housing provides 9 litres capacity.
- 5) The gear rod connects the cockpit gear lever to the transverse gearbox.
- 6) The airscoop for the gear oil cooler (7) is integrated into the rear wing support.
- 8) Mountings for the engine cover and the rear wing support wire.
- 9) The rear suspension is similar to the B189; double wishbone and push rod (9) operating Benetton damper/coil spring unit (10) via rocker (11). In order to have the same damper characteristics, the temperature of the gas must be stable. Therefore, the dampers are enclosed (12) to save them from the engine bay heat. The dampers, which may heat up (due to energy dissipation) are connected to gas cylinders (13).
- 14) The torsion anti roll bar is connected to the rockers (11) via arms and short rods.
- 15) Newly introduced oil container, probably used for the active ride system.
- 16) The rear end red light, used only in rain.

MONOCOQUE DESIGN

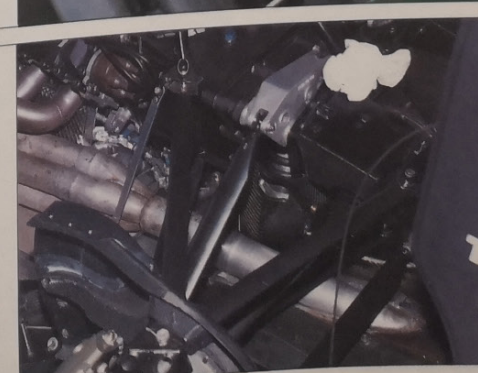
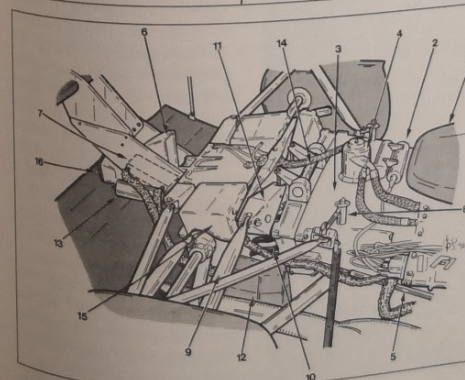
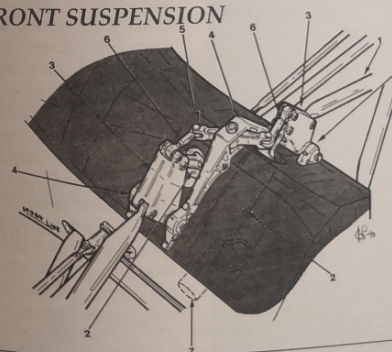
- 1) The frontis, like the Ferrari and Williams, very narrow, in order to improve airflow between the front tyres. The front is made of flat plates, whereas the rest of the car is made of curved shells, thus avoiding additional bodywork. The front end, which needs bodywork, is therefore designed entirely for optimal stiffness.
- 2) Small hole in the front plate, giving access for the mechanics to work on pedals and interior suspension parts.
- 3) Tiny holes, for the master cylinders for brakes and clutch.
- 4) The lower wishbones are mounted inside; the upper wishbones are mounted to the outside.
- 5) The cutaway shows that the design includes double walls to increase torsional stiffness.
- 6) Interior frames improve the integrity of the monocoque.
- 7) The narrow monocoque design calls for an extension blister for the gear lever.
- 9) The 200 litres ATL kevlar fuel cell is, like last year's, extended to the sides to minimize the length of the fuel tank and give optimal wheel base.
- 8) In order to conform with the FISA flat bottom rule, there is a small bubble directly under the gear lever blister.
- 10) The air intake for the engine is now integrated in the roll hoop design.

PE

MONOCOQUE DESIGN



FRONT SUSPENSION



Goodyear have one of the proudest records in Grand Prix racing, but F1 judges people by present performance, not past achievement. While winning races throughout 1990, the US tyre giant has been less comfortable in qualifying. A two-part PE interview with Goodyear's Manager of International Racing PR, Barry Griffin, throws interesting light on the current "tyre wars" and makes for some fascinating contrasts.

1. Forward from Phoenix?

Early in the season, Griffin spoke to Rick Miller about the constraints the tyre companies work under, and his expectations for the year.

"We have to build our tyres to dimensions laid down by FISA: not more than 26 inches in overall height, 18 inches in overall width when fitted to the rim. Our rear tyre is made to that maximum dimension, our front is an inch smaller and slightly narrower to achieve the balance. In an ideal world we would like to make our tyres larger, with a bigger diameter: the tyre would then be rotating more slowly, doing fewer revs per mile, which would enable it to have an easier life.

"The tyre is working very hard on a modern F1 car because there is terrific downforce on it, and after all - and this is something people rarely appreciate - it is the air within the tyre which is supporting that load. You've got to get sufficient air into the tyre, but you don't want to run the tyre at excessively high pressures, otherwise you lose grip. You are reducing your footprint on the ground, to some extent, and the compliance of the tyre disappears.

"Yes, there have been considerable advances in tyre construction: the transition from cross-ply to radial meant cornering forces increased, because a radial tyre hangs on far more than a bias tyre did. The rigidity of the tread area, especially, has contributed to higher cornering speeds. And of course there are always advances in compounding, getting more sticky.

"These cars are much easier on tyres than we ever imagined they would be, a lot of that due to the fact

Carrying the Load: A Good Year for Goodyear?

that the turbo has gone and power is applied more progressively. We're running pretty soft compounds now, much softer than we ever would have thought. So I don't think anybody can

look to the tyre companies to reduce the G-forces generated in cornering, otherwise we might have a safety situation where down the straights, the tyre is not man enough to carry that load.

"We use nitrogen to fill the tyres: it's a little more stable, a much drier gas than air. The humidity in air is the problem because the tyres are running at 100° Celsius, sometimes even hotter. Any moisture in the tyre begins to turn to steam and you lose control of your tyre pressures.

"Our test program allows us to take along new compounds, tyres built of new materials, and test them under controlled conditions. We like to test with everybody: if you don't, there is a danger you tailor-make your tyre for a participating car and, all of a sudden, it won't work on another one. If we have a new material, we're happy that you can run three or four laps for the drivers to give you some feedback, but then you've got to go back to the laboratory and do all the testing on the material to make sure it's safe before starting long runs with it.

"At the season's start in Phoenix we recognized we had work to do on our qualifying tyre, but within Goodyear we have a policy whereby we make available to every driver exactly the same quality of tyre. For Phoenix it might have been easy to bring along selected sets of qualifying tyres for the top teams, but we won't do that: the top teams have contracts with Goodyear, but smaller teams are paying a lot of money for their tyres, so we see it as not moral to give smaller people alternative tyres. We will never do that.

"Turning to rain tyres, we tested a new asymmetrical tread pattern in Portugal last winter. To produce a set of tyres you need four different moulds - each tyre needs its unique mould - which is a pretty costly business. Results were not conclusive that it was time to move to that tread design. In rain tyres it's a matter of how much void you can still get in it to drain the water away; the configuration of those voids sometimes seems secondary to just getting the land/sea ratio right,

and the choice of tread patterns can also be a marketing decision as much as a technical one.

"It has been suggested we might eliminate tyre stops, making for harder compounds, or ask teams to race on the tyres they used for qualifying, as methods of reducing high cornering speeds: we would oppose both moves. Conditions might change, for example, and from qualifying to race day, the track could change: we want to have the option as to which tyre we run. In cold weather in Friday's qualifying we might have run a very soft compound, then we get a scorching day for the race. Goodyear is happy with the qualifying situation: we know how many tyres we're committed for, and it gives us some form of control, I believe.

"We must always have the option of tyre stops, too, because the tyre is a very critical safety factor on the racing car. If the race gets hard (and we can all make mistakes in our calculations), we can't have a man hanging out there with a tyre getting thinner and thinner. Every Grand Prix we take two potential race compounds, B's being the harder, C's the softer. We always come with the intention of racing the C tyre, but it would be a foolish tyre company that went racing without something else in the truck.

"... it would be a foolish tyre company that went racing without something else in the truck..."

2. Hungary for more?

Speaking at the Hungarian Grand Prix, where Goodyear introduced a new qualifying tyre with mixed success, Griffin looked back with Tim Collings on 1990, surveyed the current F1 tyre scene and looked towards 1991.

"I expect Goodyear's presence in Grand Prix racing to remain unchanged. At this time - August at the Hungaroring - it is no secret that the Goodyear-Ferrari contract has yet to be signed. We have another two years of our contract with McLaren to run, I believe the Williams contract is in place, Benetton also seems fairly secure at this time, but Ferrari appears to be the one question-mark.

"Goodyear's weakness, if we have had one, has been with our



Tyre tests: in cornering...

... in the wet...



... and, from Goodyear's point of view, Alesi's Pirelli-shod Tyrrell in Phoenix





It helps to keep your major clients warm

qualifying tyre, particularly on the slower, low-grip circuits like Monaco and the Hungaroring. It has been our prime objective throughout the season to improve our qualifier for the low-grip circuits. For Hungary we brought a new qualifier along, which we shall probably not run again until we get down to Adelaide, also a relatively slow, low-grip circuit.

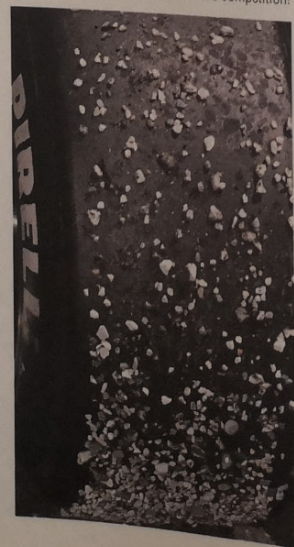
"In the meantime, we are not satisfied with the qualifier - I think if you are racing, competitive, you're never satisfied - and one of the main reasons for Goodyear's being in racing is to accept the challenge of always trying to produce a faster, more competitive race tyre. So long as that challenge exists and we are working that way, Goodyear will stay in racing.

"We are currently supplying tyres to five teams on a no-charge basis: Ferrari, McLaren, Williams, Lotus and Benetton. Everybody else is having to pay for their tyres. Of the 35 cars currently in Formula 1, 24 are running on Goodyear and we are not looking to increase our involvement. We have more than our fair share. We will not be trying to shed any of our teams unless they want to go, or there are financial problems. At this point in time we do not know the future of Lotus. We have had a long association with them; one also has to appreciate that Lotus is bigger for Goodyear than just the Lotus we see at the race-track. They have a production facility in the UK, and we have enjoyed an awful lot of business with Lotus; they are also associated, through the Lamborghini engine, with Chrysler - another significant customer for

Goodyear, which has to be taken into consideration.

"Were we surprised by the strength of Pirelli's early-season challenge? We take Pirelli's performance, or that of any other competitor, very seriously. But originally, when Pirelli were here they were learning, possibly, and we all have to go through that learning process. They might not have looked competitive; but we know you learn very quickly in this arena, and they have given us a hard time in qualifying. They hurt us in our own back garden, effectively, in Phoenix.

Goodyear refuse to throw stones at the competition!



Goodyear is an American company, and that is where we would have liked to have done well, but they did very well there. But I don't think we should put it all down to the Pirelli tyre: one acknowledges that Alesi is the new talent in Grand Prix racing, and Harvey Postlethwaite has designed a very nimble and responsive Tyrrell car.

"Some drivers have complained about disappointing qualifying tyres; we have responded to all our critics as best we have been able to in the time available. But it is very difficult to get teams to go testing during the season. It is also difficult to get to the type of circuit where we have been at our most vulnerable - the low-grip ones. You can't test at Phoenix or Monaco, you can't test at Adelaide. We tried to schedule a test at the Hungaroring, but it had to be cancelled due to heavy commitments on the track. We have had problems to do the testing we would have liked in the areas where we are weakest. We haven't found that quantum leap we all dream about in Grand Prix racing, but we are aware of our competitors, we respect them on low-grip circuits, and we're not stopping with the tyre we had in Hungary: we believe we've got to get more from it than that."

PE

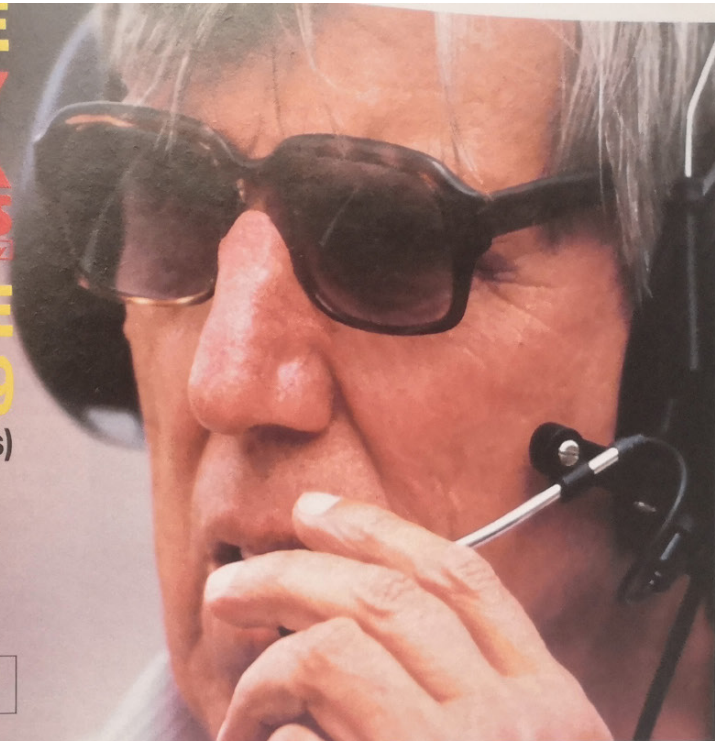
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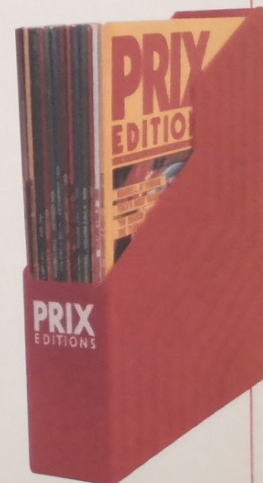
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Eddie Cheever is on target in his new career as a contender in the CART Indy Car ranks. Cheever spent 10 years in Formula One, the last of which wasn't very enjoyable.

"I had a big problem last year," says Cheever. "The racing car that I was driving was so small that I could barely fit into it. Also, I was getting tired of the fact that I was racing with an engine that had very little possibility of doing anything. I finished 11th in the Championship with one third and one fifth. That says a lot, doesn't it? It really wasn't that good a year. And I wanted a change of pace. I wanted something different."

"I was very close to doing a deal with Tom Walkinshaw Racing and Jaguar to do endurance racing this season. I was on a business trip here to the States, and I met up with Chip (Ganassi). A week after I saw Chip he took controlling interest of the Patrick Racing team and he asked me if I wanted to drive a Chevy-powered car in CART next year. It didn't take very long to get an agreement..."

So this season Cheever is driving for a top ranked team in the PPG CART series - Chip Ganassi Racing. Last year Ganassi and Pat Patrick fielded the Penske which Emerson Fittipaldi used to win the Indy 500 and the CART Championship.

In 1990 Ganassi and Patrick went their separate ways. The "new" Ganassi team has a sound package: a 1989 Penske chassis, a new 1990 Lola chassis, the coveted Ilmor Chevrolet V8 turbo, sponsorship from Target (a chain of department stores) and Eddie Cheever.

On Target: Eddie Cheever

by
DAN KNUTSON

Cheever's first Indy Car season is producing solid results. He finished eighth in the Indy 500, a drive which earned him the "Indy Rookie of the Year Award", with several top-six finishes on top of that.

What differences did Cheever discover between the atmospheres of Formula One and CART?

"I think CART is a little more relaxed when you are out of the car compared to Formula One," Cheever says. "But the competitiveness on the circuit is very similar. I have always found the competitiveness on the cir-

cuits very similar in any category I've raced in except sports cars."

Many Formula One people say that CART is a second-rate series. Now that Cheever has raced against the Indy drivers, how does he respond to that?

"I'm very proud of the racing I did in Formula One; some of it was good, some of it was bad. I'm glad that I raced in Formula One and one day I might return if I can find the right sort of motivation and the right sort of car. I needed a change of pace. Indy is different."

"I find that both categories have a group of people that are extremely motivated. I find that very exciting. Sometimes when I'm racing I don't even think about if I'm in a Formula One car or an Indy car. If you sit back and take out all the fanfare and all the noise produced from both sides, both categories are very similar."

"I think if you take the whole Formula One grid, maybe there are two or three drivers that aren't very good, but the rest are excellent talents - people who have had to work very hard to get into the positions that they're in. I think getting into Indy racing is a lot easier, and because of that, the whole quality of the grid is not as high as you would have in Formula One. But if you take the top racing drivers in both categories, I think that both groups are very motivated, very talented and they've proved it."

One of the biggest differences between CART and Formula One is that CART races on oval circuits. Many of the Formula One fraternity say that oval track racing is nothing more than turning left four times.

"Yes," Cheever says. "You are turning left four times, but all of motor racing is repetitive. If you race at Monte Carlo you do the same lap 78 times. That's part of what racing is all about."

"But, technically, it is very difficult for Indy cars to be able to handle the high speeds on ovals. Every corner can be dissected into five different parts, so you have to work very hard all the way around. On a road course you can correct a mistake, but on an oval course it's imperative that you don't correct. If you do correct an oversteer situation, you are going to go right smack into the wall. The downside on an accident on an oval is a thousand times worse than it is on a street circuit."

"I will accept criticism about an oval from somebody who has driven on one," Cheever says. "But, having gone through the whole process myself, I find it very silly for someone to say that an oval is a very simple race. It's not. It's a very complicated race, and it's very difficult to get it right the same way Formula One is very difficult to get it right."

Formula One has a technical advantage over CART. A Formula One car will outperform an Indy car on a circuit like Long Beach or Monte Carlo. That's just the way the rules are written. Then, again, there isn't enough money in the world to make me sit in a Formula One car at Indy. It's just not made to do that."

What was it like for Cheever the first time he got up to speed on an oval? Was it frightening to be going 200mph just inches away from the concrete wall?

"It's difficult to compare it to anything," Cheever says. "An Indy car that's working properly is very exciting. You have to put a lot of commitment into it, and the repayment you get from that commitment is very high. An Indy car on an oval that is not working well is one of the most terrifying things any race driver can go through."

"An oval is a completely different race course, and it takes a completely different technique. It takes a lot of time to learn how to do it properly. The car has to work. The car has to work in any sort of racing, but on an oval it's imperative that it works."

How difficult is it to set up a car for an oval?

"I'm still learning a lot," Cheever says. "I'd say on a scale of 1 to 10, I'm probably on a 3. Then, again, I'm racing with an '89 car and we are having problems trying to find the sort of balance we need."



Pointless story with Alla-Romeo.



Three rostrum finishes with Renault in '83 - it took him five years to achieve his next





like Spa. But from the slowest circuit to the fastest circuit, there really isn't that much of a difference. Whereas an Indy car has to race at street circuits like Long Beach or Detroit and then two weeks later has to race at a high speed oval like Indy or Michigan, so a CART car has to be designed for a wide spectrum of circuits."

A typical CART weekend is similar to a Formula One weekend: two days of practice and a race on Sunday. The Indy 500, of course, lives by its own rules and in its own world. It takes the entire month of May to run the Indy 500. Cheever's nomadic life style meant that he had not spent a whole month in the one spot for the last 10 years! So what was it like to spend an entire month at Indy?

"At times very frustrating," Cheever says, "at times very exciting. Every day you get up at 8 in the morning and test from 11am to 6pm."

"At Indy, with the high speeds you are racing, there are a lot of track controls. If a chipmunk comes out onto the track or a piece of paper blows on, they stop the session. So you really don't get that much work done. Maybe in a good day you may get 100 miles in, so it's very difficult to get the bit between your teeth and get down to work because it's always interrupted by yellow flags. So it's a long month, but, inevitably, you never have enough time."

And about the race itself?

"First," Cheever says, "you avoid an accident on the first lap. There's a lot of dirty air, a lot of buffeting. Then you get in a group of cars and feel your way around the course. It's like any other race. It really isn't any different, except the speeds are that much higher. As the race goes on you start to get a feel for what is happening. It's very long... like doing three or four stints at Le Mans. It takes a lot out of you. It's a never-ending episode."

Today he's still the same intense driver he was in Formula One. But he's happier, more relaxed, and more talkative. He's definitely enjoying his first year in Indy Car racing.

"I'm a racing driver," Cheever says. "And I'm very glad that I got to drive in both series. I think a racing driver is really only truly complete when he's also driven an oval. If you are a mountain climber, why do you climb Mt. Everest? Because it is there. The same thing applies to ovals. Why race an oval... it's only four corners. It's because it's fast, because it's there."

PE

The '89 cars have to be fitted with a diffuser - an insert put into the ground effects tunnels - to downsize the tunnels to the 1990 rules. The 1990 cars have proved to be faster and better balanced than the 1989 cars. So Ganassi ordered a new 1990 Lola for Cheever.

Going back to ovals, who helped Cheever set up his car for oval racing?

"I think your crew has a lot to do with it," Cheever says. "The crew here has a more important role than in F1. That's one of the biggest things I never liked about Formula One - that they were very sectarian in their approach. I mean the mechanics were mechanics and the racing drivers were racing drivers and the team owners were the team owners. In CART the crew chief

has a lot more to say, and there is always a lot of input from the crew."

"It's difficult to say who helped you the most. I think the most help you get is through yourself by spending time on the track, learning, making changes. It is very difficult to feel the limit of a car... when if you make a mistake you go right smack into the wall at 200mph."

What about on the road and street circuits? How different is the driving style between a CART and a Formula One car?

"The races are longer," Cheever says, "you have more pitstops. Again the crew comes into the picture a lot more than you expect."

"A Formula One car is designed to go on road courses or on fast circuits

= SPORTS SEEN =

The Motor Sport Print People



"RINDT REMEMBERED"

BY ARTHUR BENJAMINS

ON 5TH SEPTEMBER 1970, WHILST PRACTICING FOR THE ITALIAN GRAND PRIX AT MONZA, JOCHEN RINDT CRASHED HIS LOTUS 72 AND WAS KILLED INSTANTLY. HE WAS, HOWEVER, LEADING THE CHAMPIONSHIP BY SUCH A MARGIN THAT HE BECAME THE SPORT'S ONLY POSTHUMOUS WORLD CHAMPION. IN MEMORY OF THIS GREAT TALENT, ARTHUR BENJAMINS HAS PRODUCED THIS STIRRING PAINTING OF JOCHEN DURING THE 1970 MONACO GRAND PRIX, A RACE WHICH WILL ALWAYS BE REMEMBERED BY ANYONE WHO SAW IT AS PROVIDING ONE OF THE BEST DRIVES BY ANYONE IN THE HISTORY OF MOTOR SPORT.

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On Whit Monday, 1964, I persuaded my father to drive me to Crystal Palace to spectate at the Formula 2 international meeting. I was about three weeks short of my seventeenth birthday, the Dartford Tunnel was within days of opening and this was to be only the second motor race meeting I had ever attended.

My father duly obliged and, from that day onwards, the sport assumed a dominant role in my life. The sight of a dark blue Brabham being flicked from lock to lock as if it were a Lotus Cortina saloon held me absolutely captivated. Its driver was Jochen Rindt and, to this day, his name excites in a way matched only by Ronnie Peterson and Gilles Villeneuve in the years that followed.

During my career as an F1 insider, I have noticed that my fellow scribes generally fall into one of two camps. There are those who over-earnestly believe that the name of the game is to accumulate sufficient points over a season to win the World Championship, and those romantic buffers - whose ranks I joined long before the age of 40 - who cling to a quaint notion that how a driver does things can be a damn' sight more important than what he actually achieves.

Although Jochen Rindt would eventually win the World Championship, posthumously, in 1970, it was the way in which he went about his motor racing that fired my interest and imagination. Here was a free spirit who, in the words of his F2 Winkelmann team mate Alan Rees - now manager of the Footwork Arrows F1 outfit - "was giving one hundred per cent to his motor racing and not hiding the fact that he was having one helluva good time doing so."

The story of Rindt's life and times has an heroic ring to it, something that could have been plucked from a boy's adventure story. Born in 1942, at the height of the Second World War, he was orphaned before he was two years old. Going to live with his maternal grandparents in the sleepy Austrian provincial town of Graz,

A Schoolboy's Hero: Jochen Rindt

by
ALAN HENRY

he grew up into a rebellious teenager. Surviving a wild apprenticeship to become one of the world's top Grand Prix drivers, he married a beautiful Finnish fashion model, lived in Switzerland and died as he was poised to take the World Championship when his Lotus 72 crashed during practice



for the 1970 Italian Grand Prix at Monza.

Unquestionably, Rindt was arrogant, self-confident and highly motivated. He grew to racing maturity at a time when Formula 2 provided a crucial stepping stone to F1 in days that Grand Prix drivers were not so obsequiously overpaid that they could turn their noses up at any other category of racing. The mid-1960s was a time when competitors were not afraid to let people know just how much they loved motor racing. They were relatively uncomplicated sportsmen, not overpaid, distant prima donnas who sit counting their fortunes in Monaco high-risers.

After making his F1 debut at the wheel of Rob Walker's Brabham-BRM in the 1964 Austrian Grand Prix on the bumpy Zeltweg airfield circuit, a stone's throw away from where the splendid Oesterreichring would eventually be built, he dearly wanted to drive for Rob fulltime the following year, but Walker recommended he try to get into a works team which would be able to obtain guaranteed entries for him in all the Grands Prix.

As a result, Jochen signed a three year deal with Cooper, the first season of which was spent in a depressingly uncompetitive car as the once-proud British team staggered through to the end of the 1.5-litre Formula 1, its eyes firmly set on the new 3-litre category which started in 1966. These days, a new driver in an uncompetitive team would, like as not, be written off almost before his career began. But Jochen's exploits in Formula 2 ensured that his talent went repeatedly on display.

Inequal cars, he was more than a match for Jim Clark, Jackie Stewart and Graham Hill in this technically uncomplicated second division category where sheer driving virtuosity was the only factor that seriously counted.

In 1966, the Cooper-Maserati T81 enabled Jochen to demonstrate his F1 potential, notably at Spa-Francorchamps where he survived a brain-rattling 150mph spin on the Masta straight in the first lap rain storm which effectively eliminated half the field. He

recovered to lead John Surtees' Ferrari with great skill until the track began to dry out and John pulled ahead.

He finished that season third in the Championship stakes, headed only by Jack Brabham and Surtees, but without a single Grand Prix victory to his credit. The following year saw Cooper's star fade dramatically and Rindt's fortunes slumped accordingly, but a switch to Brabham in 1968 seemed guaranteed to produce the success he'd long been seeking. After all, Jack's Repco-engined cars had won the title the previous two years and there was every reason to believe that Jochen could complete the hat trick.

Sadly, it all went badly wrong. The latest four-cam Repco V8 turned out to be a horrifyingly unreliable dud. Yet Rindt is recalled as a "thoroughly good bloke" by all who worked with him during that troubled season. John Judd, who currently builds his own F1 engines, was then an engineer on the Repco project and thought Jochen was terrific: "very supportive indeed. He understood just how hard we were working to make it successful and he never, ever complained, although it must have been enormously frustrating for him."

Much as Rindt loved driving for Jack Brabham, a man in whom he had considerable faith, Lotus boss Colin Chapman hove onto the scene at the end of the season with an offer for him to join Graham Hill at the wheel of a Lotus 49B in 1969. Rocked by the death of Jim Clark earlier that same year, and unable to persuade Jackie Stewart to join him, Chapman targeted Jochen as simply the fastest driver available. But it was hardly destined to be a marriage made in heaven.

Whilst admiring Rindt's tremendous speed and reflexes, he found it enormously difficult to get on with the Austrian on a personal level. After that eight-year alliance with Jim Clark, throughout which the two men had enjoyed an almost telepathic relationship, Chapman found Jochen to be a totally different kettle of paranoias. It wasn't helped by the fact that Rindt kept telling him that his cars were not strong enough.

In fairness, you could see Rindt's point of view. One of Chapman's absurdly spindly aerofoils-on-stilts had collapsed while he was leading the Spanish GP at Barcelona pitching him into the most horrendous accident. Whilst recovering from a broken nose and hairline skull fracture, Jochen had the temerity to write to Colin telling him that he was getting fed up with the fragility of his racing cars.

Such was Jochen's genuine apprehension that, at the end of the season, he investigated the possibility of returning to Brabham. But Chapman made it clear that he would out-bid any financial offer that Jack and Goodyear could jointly make and the deal never came off. Rindt stayed with Lotus into 1970.

My colleague Denis Jenkinson, he of *Motor Sport* magazine and the beard, was one of many who remained unconvinced of Jochen's potential. Jenks even went so far as to stake his barbed appendage on the fact that the Austrian would not win a Grand Prix in 1969. Rindt duly obliged with a flawless victory at Watkins Glen and off came the beard...

Then came the high summer of 1970 and with it four glorious victories in Chapman's new baby, the sensational Lotus 72, to add to an early season success with the 49C at Monte Carlo. Rindt had at last matured and, to judge by the photographs taken at the time, his eyes betray an inner per-

sonal serenity. OK, so rumours abounded that his marriage to the lovely Nina was on the rocks. But he had proved his worth, his status as a top-line Grand Prix driver beyond question.

But for a broken brakeshaft on that Lotus 72, Jochen Rindt would have lived to savour his longed-for World Championship. He would have raced for another year, maybe two, before beating Jackie Stewart to well-heeled retirement on the edge of that Swiss lake.

Had he survived, I find it easy to imagine what he might be like today: impeccably dressed, 48 years old, perhaps greying slightly, making the occasional visit to the pit lanes of Europe. Ragging his old pal JYS, signing autographs, perhaps even making more money than his one-time manager Bernie Ecclestone.

And one portly hack, approaching middle age, might have had the chance to know his schoolboy hero.

PE



Brands Hatch 1970: Rindt on pole on the inside with Brabham (Brabham) and Ickx (Ferrari) alongside him. Ickx and Brabham would both lead, but it was Jochen's race in the end





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1991 MOTOR RACING CALENDAR

Le Mans 24 Hours	Le Mans	June 15/16
United States GP	Phoenix	March 17
Brazilian GP	Interlagos	March 31
San Marino GP	Imola	April 21
Monaco GP	Monte Carlo	May 12
Canadian GP	Montreal	June 2
Mexican GP	Mexico City	June 16
French GP	TBN	July 7
British GP	Silverstone	July 14
German GP	Hockenheim	July 28
Hungarian GP	Budapest	August 11
Belgian GP	Spa	August 25
Italian GP	Monza	September 8
Portuguese GP	Estoril	September 22
Spanish GP	Jerez	September 29
Japanese GP	Suzuka	October 27
Australian GP	Adelaide	November 10

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GAULD MINE

This Month:
The Innes Book of
Records!

Innes Ireland reached the ripe old age of 60 earlier this year and it set me thinking about this man who provided such a lot of fun in his Formula 1 career but who, like many funsters in all walks of life, never truly got the breaks he deserved.

To some people Innes was a clown prince always at the source of some prank or another whilst to others he was a frighteningly quick and brave driver in the Mansell mould.

What made Innes Ireland universally tolerated despite some of the outrageous things he used to do was that he was very human: imbued with all the braggardly confidence and harrowingly depressing moods that most ordinary human beings have and which racing drivers are not supposed to have.

In a way I suppose Grand Prix racing misses the Innes Ireland and Harry Schell types but, honestly, they would not go down well with the current scene and the sponsor hype which demands a kind of squeaky cleanliness and discretion that never infected people like Innes Ireland.

He had a certain style about him and I remember the first time I met him socially at a meeting. It was in 1958 when he was still driving a privately-entered Lotus 11 in sports car races. The scene was the paddock in the little village of Olon in Switzerland prior to the European Hill Climb Championship event. Sitting in the sunshine by the ornamental square I asked him what he was doing at a hill climb for even if he won his class he was likely to get 20 quid.

"Well old boy, it's true I'll only get 20 quid but they offered me 200 quid starting money and you can't pass that up can you?" Mind you at the same event you had

Grand Prix drivers like Jean Behra, Wolfgang von Trips, Maurice Trintignant and others taking part.

Innes and Lotus were made for each other because Innes was so keen he would drive anything, which led to his first Grand Prix, the 1959 Dutch Grand Prix in the first of the front-engined Lotus cars.

These were truly Lotus's dog days and the cars were real dogs. As an extra the excitement of the accidents was half of the fun and during his career Innes had some Lulus. He broke his body badly in the tunnel at Monaco and was later to have a horrendous one, again in a Lotus, this time a 19 sports car with a Ferrari engine owned by the American Rosebud team, at Watkins Glen when he had the misfortune to hit a marshal's post and then a marshal's car.

It was all good *Boys' Own* stuff though his carousing and womanis-

ing was so legendary that his story would have been better told in *Playboy* than *Boys' Own*. As a motor racing business man he also left a lot to be desired and always seemed to be wealthy one day and teetering on the brink of disaster the next but no one could ever accuse him of not being fast and entertaining.

During his career he raced in 50 Grand Prix races and scored 47 World Championship points which is a respectable average and better than a hell of a lot of drivers in Formula One racing today. His only Grand Prix win was one for the record books for his victory in the 1961 US Grand Prix at Watkins Glen marked the first occasion that a Team Lotus car had won a World Championship race.

A couple of weeks later, however, Colin Chapman told him that his services were no longer required and this act of apparent back-stabbing embittered Ireland towards Chapman and towards Jimmy Clark whom he initially blamed for having him fired from Lotus. Clark actually had nothing to do with it and at first couldn't understand the animosity between Innes and him. Even today Innes bitterly regrets the fact that he never made his peace with Jim Clark before Clark was killed and it is a mark of the man that he was prepared to admit it. It was ironic that of all the obituaries written about Clark it was Ireland's in *Autocar* which was perhaps the most honest and touching. But then this is part of the charm of Innes Ireland. Even at sixty years of age he acts forty-five; but after a heavy night can look seventy! He still has that cheeky sense of humour and can still make a mess of a bottle of Glenmorangie in pretty quick time. Happy birthday, Innes, from all your friends.

PE

Ireland in typically relaxed Lotus position!



One-Track-Mind

COMING UP IN OCTOBER: JAPANESE GP, SUNDAY 21ST



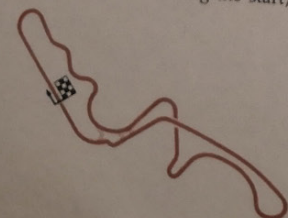
Getting There

Suzuka's circuit is located close to the town itself, 450 kms west of Tokyo, 150 kms east of Osaka and 50 kms south-west of Nagoya.

By air: Nagoya is the closest international airport, with flights - probably via Tokyo - to most destinations. While Osaka also has an international airport, Japan's biggest is Narita, near Tokyo, and Suzuka can be reached by train from both Tokyo and Osaka airports.

By car: from Tokyo, take Tomei Expressway to Suzuka, but remember overseas visitors need an international driver's licence - and the Japanese drive on the left. It is much easier, given language, road-signs, heavy traffic and other difficulties, to use train or bus.

By train/bus: the famous bullet train or "Shinkansen" does the Tokyo-Nagoya trip in two hours; transfer at Nagoya to the "Kinetsu" line for Shiroko, from where special bus or taxi takes you to the track (15 minutes). From the Osaka side, the Nanba station has express trains on the "Kinetsu" line to Shiroko.



Suzuka Circuit
7992 Ino-cho
Suzuka-shi
Mie-ken 510-02
JAPAN

Tel: (81) 593 70 14 65
Fax: (81) 593 70 18 18
Tlx: 49 47 41 6 HCTP J

Ticket sales:

Suzuka Circuit Co. Ltd.
Akasaka Twin Tower
East Tower 16F
2-17-22 Akasaka
Minato-ku
Tokyo 107, JAPAN

Tel: (81) 3 58 23 221
Fax: (81) 3 58 23 023
Tlx: 22 27 048 SCLAND J

The Circuit

Previous winners: 1987 Gerhard Berger (Ferrari), 1988 Ayrton Senna (McLaren-Honda), 1989 Alessandro Nannini (Benetton-Ford)

Suzuka is unique in having a section where the track actually crosses over itself - via a bridge, of course! Its 5.859 kms include a number of sinuous turns including two fairly tight left-handers. It allows high-speed performance but its high-grip surface puts a premium on tyre wear. There are only three sections where drivers are likely to snatch top gear: crossing the start/



Last year's winner: Alessandro Nannini (Benetton), 1hr 35:06.277.

finish line, the short stretch before the right-hander on to the circuit crossing, and the straight three-quarters of the way round as they head back towards the pit straight itself. Otherwise Suzuka is full of 3rd-4th gear turns and demands a high level of concentration.

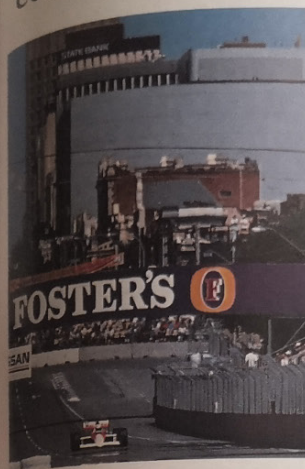
Being There

With so much pressure on the Suzuka Circuit Hotel and Suzuka's other major addresses, it is best to try Shiroko, Yokkaichi or even Nagoya. The circuit boasts a well-run campsite directly across from its main entrance, but early arrival is a must.

The circuit and its "Motopia" amusement park contain several good eating places, like the Grand, the Grill Platanus or the Lou-Lan, and the park itself - complete with bowling alley, skating rink and driving range - is an ideal place to while away the evening. Nightclubs and Japanese-style discos can also be found in both Shiroko and Yokkaichi.

Superb souvenir stands, outstanding facilities - but very crowded, and Japan is very pricey.

COMING UP IN NOVEMBER: THE AUSTRALIAN GP, SUNDAY 4TH



Australian Grand Prix
Circuit
300 Rundle Street
Adelaide
South Australia 5000
AUSTRALIA

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Fax: (61) 8 23 22 625
Tlx: 89 811 ADELGP AA

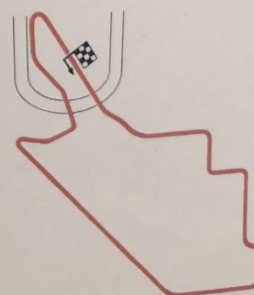
Tickets:
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King William Street
Adelaide 5000
South Australia

Tel: (61) 8 18 80 14

The circuit

Previous winners: 1985 Keke Rosberg (Williams-Honda), 1986 Alain Prost (McLaren-TAG Porsche), 1987 Gerhard Berger (Ferrari), 1988 Alain Prost (McLaren-Honda), 1989 Thierry Boutsen (Williams-Renault)

Adelaide's 3.78 kms wind through part of the Victoria Park racecourse (start/finish and pits complex) before heading out into the streets: a quick left-right flick, shallow left turn, then two 90-degree right-handers. Next a left-right sequence before the famous landmark of the Stag Hotel, sharp right on to Jones Straight, and the fast right-hand sweeper on to the longest straight in street racing - Dequetteville Terrace, otherwise known as Brabham Straight. Hairpin right, left into the racecourse, quick left and right, hairpin right on to the pit straight again. Last year it took pole-sitter Senna just 1:16.665 (177.5 km/h).



THE 500TH RACE IN WORLD CHAMPIONSHIP HISTORY

Getting There

Adelaide's semi-permanent street circuit is close to the city centre on its south-eastern corner, adjacent to the sweeping parklands, and partly within the confines of the Victoria Park racecourse.

By air: Adelaide's international airport, on the south-western fringe of the city, has direct flights on Singapore Airlines and Qantas, others making transit stops in Melbourne or Sydney. If stopping over in Sydney, Adelaide is a two-hour flight on Australian or Ansett, Melbourne just an hour. Bus or taxi is a short ride to the city centre.

By car: South Australian capital city Adelaide has good road connections to other major cities, but the European visitor needs to allow time both for the scale of the country and sightseeing en route! If coming from Melbourne, the coast road via Port Campbell is spectacularly beautiful but slow.

By train/bus: Greyhound and Pioneer Ansett are among coach companies operating fast services into Adelaide; train services tend to be on the slow side.

Traffic is not a major problem around the well-organised Adelaide circuit; staying centrally, walk or take a taxi.



Last year's winner: Thierry Boutsen (Williams-Renault), 2 hrs 00:17.421.

Being There

Adelaide is F1's happiest discovery of recent years: a lovely, welcoming city where the street party seems to go on throughout the long weekend for those not worn out by a hectic schedule of on-track events. Hotels abound and are being added to year by year, but advance reservations via Tourist Offices are advisable. Adelaide boasts more restaurants per head of population than most other cities, all of them good, some outstanding, ranging from authentic Australian to excellent ethnic.

The nearby Barossa and Clare Valleys to the north offer some of the outstanding wines of Australia, while a short drive south leads to McLaren Vale and a host of equally good wineries. West is the ocean with some magnificent beaches; east are the beautiful Adelaide Hills.

Night-life is a problem: how to decide what to do next! And after this year's race, in the circuit itself, there is the added free bonus of a Cher concert. Adelaide Alive, Roar Energy: whatever the slogan, Australia's race is hard to rival on the annual F1 calendar.

FORMULA FUN

Back to Front!

It has long been a fashionable notion to be interested only in the front-of-the-grid cars which can dominate World Championships and Grand Prix racing, but this month I would like to ignore fashion and concentrate on model cars from the back of the grid.

Most larger-scale kits may seem only to be made for the well-known cars like McLaren, Ferrari, Lotus and the rest but it is possible to find in 1/43 scale quite a variety of the back-markers who always add sparkle, colour and spectacle to Grands Prix.

And, of course, some are very interesting both historically and simply to look at: cars like AGS, EuroBrun, Onyx and the rest can be fascinating to study. This year, already, one of the most frequently-requested cars is the Life.

At the time of writing, however, Tameo and Meri kits have not yet decided if the model will be produced or not. Personally, I hope it will be... but wonder if it will come complete with towing rope and recovery wagon?

Quite a number of back-of-the-grid cars are still around now from 1988 and 1989. These include AGS JH23 Brazil, AGS JH23 Monaco, Osella FA1L, Coloni-Cosworth CF188, Lola-Cosworth LC88, Minardi-Cosworth 188, Rial-Cosworth ARC0, Zakspeed ZK881 (all Tameo); EuroBrun ER188, BMS Dallara 188, Ligier-Judd JS31 (all Meri); BMS Dallara 189 Monaco (Meri/Tameo), Ligier-Cosworth JS33 (Meri/Tameo), AGS-Cosworth JH24, Minardi-Cosworth 189, Onyx-Cosworth ORE01 and Osella FA1M (all Tameo).

There are plenty to choose from, and obviously these cars help provide extra interest and talking-points in your collection.

McLaren MP 4/5 in 1/43 scale from Meri and Tameo



NEW MODELS

By now, local model shops should have in stock the following kits: McLaren MP4/5B USA, Tyrrell 018 USA, Ferrari 641 USA and 641/2 Monaco (all Meri/Tameo); Lotus 102 San Marino (Meri), and Williams FW13B San Marino (Tameo). Don't forget these are all 1/43 scale, retailing at about £19 each. Note: last year a kit promised but never produced was Tameo's 1/43-scale Osella, another car with 'back-of-the-grid' interest: it will now be produced by Meri.

Finally, may I say I have had over 1,500 requests for the F1 colour charts; this will mean, regrettably, that some enquirers may have to be disappointed. I am trying to obtain a new supply, though not having any luck at present. Thank you for your patience!

(Incidentally, this year's Meri kit range comes complete with a pot of paint and seat belts at no extra costs: watch out, Tameo!)

MAILBAG REPLIES

Mr R G Lewis, Cardiff: No manufacturer planning a 1/12 model of the Williams FW13B; only version available is Meri/Tameo 1/43.

Mr V Bengtsson, Finland: Yes, a 1/12 model of the Ferrari T4 and T5 is still available from Protar kits.

Miss S Cowper, Hong Kong: Sorry, can't find details of a Meri stockist in your country - try mail order.

All the best to all readers - if you wish to write, please do so c/o *Prix Editions*, enclosing a stamped, addressed envelope, and allow up to four weeks for reply. Thank you.

ALLEN SYMS
Just Cars Anyway

Answers to Quiz No. 5 - 1985
1. Arnoux 2. under weight limit 3. France 4. first one-lap speed over 150mph 5. Teo Fabi-Toleman 6. Spa 7. Brands Hatch 8. Kyalami, Zandvoort, Nurburgring (any two accepted) 9. Italy 10. Canada, Lotus - De Angelis, Senna.

Duke Marketing's 10 Video Winners
D. Hurley, Northumberland. M. Young, Kent. M. Orr, Cumbria. I. Gowek, Kent. M. Leathers, Isle of Wight. C. Ellis, Jersey. M. Davies, Southampton. M. Sidaway, Kent. A. Packham, W. Sussex. A. Kerley, Hants. Just Cars Anyway Model Winner A. Mahon, Bedfordshire

Now for this month's quiz which is all about 1983. Answer correctly the 10 questions in our special panel and you could be in line for a video treat from Duke Marketing or a Just Cars Anyway model.

Send your answers on a postcard to:

Formula Fun (October)
First Frost Ltd.
Lyon Road, Windsor Avenue
Wimbledon
SW19 2SE

to reach us no later than
26th October

Answers in our December issue



A SIDEWAYS LOOK AT 1983

- Who, in the US, scored the last GP win of his career?
- Nelson Piquet was World Champion. Which race brought his only pole position of the year?
- How many races did Niki Lauda win?
- Who partnered Alain Prost in the Renault team?
- What race number did Nigel Mansell carry?
- Who crashed while leading the San Marino Grand Prix?
- Apart from Brabham which other team used BMW engines?
- Who made his GP debut for Williams at Brands Hatch?
- Where did Bruno Giacomelli score his solitary point of the season?
- Which famous team had its last win to date in 1983?



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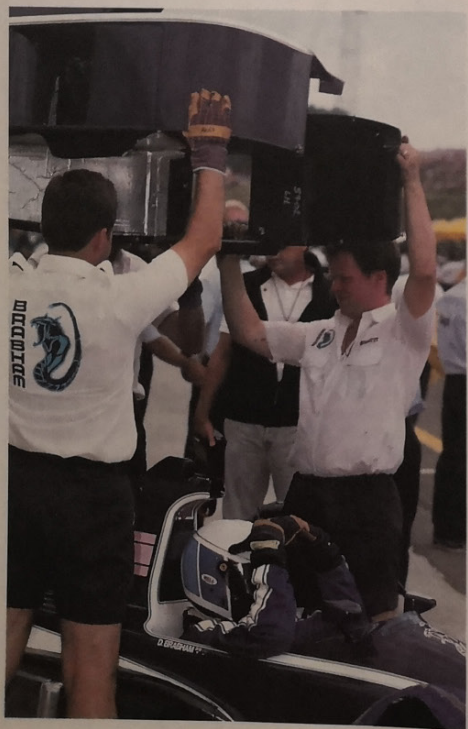
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PIT FALLS

Life on the pit lane's lighter side

"Now look, guys, if you drop that thing on my head just once more there'll be hell to pay..." David Brabham had a difficult time in Hungary: wonder if it was anything to do with how his Brabham pit crew handled the bodywork?

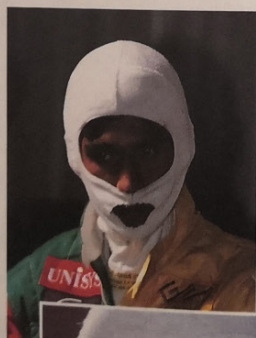


(LAT)



(Dominique Leroy)

Have you seen the rubbish they print in this thing? An incredulous Yannick Dalmás seems to be taking F1 far from seriously in a private moment at the recent opening of the new AGS facility in the south of France...



(LAT)



(Dominique Leroy)

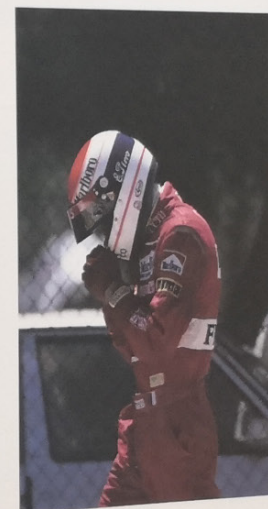
think they're trying to tell him something? Hungary is so close to Austria that the Berger brigade, starved of Grand Prix racing in their own country, flock to Budapest to pay homage to the court of King Gerhard. Thou shalt not make false idols...



(Sporting Pictures)



(Dominique Leroy)



Still on a Biblical note, Emanuele Pirro has been through so much in recent months he's clearly decided there's only one answer to his problems - to seek solace in prayer!

How are you feeling, Aguri? Could be the question on Jean Alesi's lips - if the Frenchman were able to move his mouth in what looks like a rather tight balaclava. Or had Ken Tyrrell made a small adjustment to keep his driver quiet after that tricky Hockenheim press conference? Suzuki, meanwhile, looks like a refugee from a fiendish dentist...

In fact things got so bad Alesi decided to quit the cockpit and take up the medical calling instead! No, seriously, it was just a GP doctor friend of his making nodding acquaintance with fame in Alesi's distinctive helmet.



(Sporting Pictures)

A.....Z OF FORMULA ONE

FABI, Teo: Italian, born 1955. GP debut San Marino 1982 (Toleman), took part in 7 races that year. Joined Brabham in 1984, Toleman again 1985, then had two seasons with Benetton before ending his F1 career after 65 Grands Prix. 3 poles, the first of these - Germany 1985 - the first in Toleman's history; best result 3rd (USA 1984 and Austria 1987).

FAGIOLI, Luigi: Italian, born 1898, died in practice at Monaco 1952. One of the legendary "Three F's" of Alfa-Romeo's heyday (see also Fangio, Farina), he contested 7 World Championship races for them. Lone victory: France 1951 - but it gave him the record as oldest man to win a World Championship race, at 53.

FANGIO, Juan Manuel: Argentinian, born 1911. GP debut GB 1950 (Alfa-Romeo) at the tender age of 38. Drove for them 1950-51; broke his neck in a Monza crash and missed the 1952 season; joined Maserati 1953-54, moving to Mercedes later in '54 and staying on in 1955; Ferrari for 1956, Maserati again 1957 until his last GP (France '58). 24 wins, 28 poles, 23 fastest laps in 51 Grands Prix; five times World Champion: 1951-54-55-56-57 - and a likely visitor to the 500th race in World Championship history, Adelaide 1990. The greatest driver ever?

FARINA, Giuseppe: Italian, born 1906, died in a road accident 1966. Had a Doctorate of Laws, gained reputation as a great stylist behind the wheel. Alfa-Romeo 1950-51, Ferrari from then to his last race (Belgium 1955). Winner of the first-ever World Championship race (GB 1950), and first World Champion that same year. 5 wins, 5 pole positions, 6 fastest laps in 33 Grands Prix.



FERRARI, Enzo: Italian, born 1898, died 1988. Started as a racing driver, switched quickly to team management for Alfa-Romeo in the first instance, then by creating the most famous team in Grand Prix history - which in 1951 became the first to beat the all-conquering Alfás. The famous 'Cavallino Rampante' or Prancing Horse motif was handed on to him by the mother of World War I flying ace Francesco Baracca. A legend in both sportscar and F1 circles, with 8 World Constructors' titles; his team this year became the first to record 100 Grand Prix victories, and men like Ascari, Fangio, Hawthorn, Lauda, Scheckter and others have claimed the World Championship in his scarlet cars produced at Maranello, in northern Italy.

FISA: Federation Internationale du Sport Automobile, the Paris-based organisation that controls major motor sport worldwide under the presidency of Jean-Marie Balestre and its parent body the FIA. Successor to the Commission Sportive Internationale, it fought a bitter war with FOCA (qv) until the celebrated reconciliation of 1987.

FITTEPaldi, Emerson: Brazilian, born 1946. GP debut GB 1970 (Lotus), stayed with that team through 1973; moved to McLaren 1974-75 before joining brother Wilson (who raced 36 times himself for Brabham 1972-73, Copersucar 1975) in the Copersucar

team for five largely unsuccessful seasons. 14 victories, 6 poles, 6 fastest laps in 144 Grands Prix; World Champion 1972 (Lotus), 1974 (McLaren) - the youngest in the history of the sport. Now a fierce Indycar competitor and 1989 Indianapolis 500 winner (see PE vol 4 no 1, March 1990).

FLOCKHART, Ron: Scottish driver, born 1924, died in air accident 1962. GP debut GB 1956 (BRM); contested 12 Grands Prix, 9 for BRM, others for Connaught, Lotus, Cooper, but much better known as Le Mans winner with Ecurie Ecosse Jaguars in the mid-50's. Best result: 3rd Italy 1956 (Connaught).

FOCA: Formula One Constructors' Association, spawned in the 70's, at loggerheads with FISA in the early 80's. Brainchild of Bernard Ecclestone, now without doubt the most influential man in the sport.

FORGHIERI, Mauro: Italian engineer famous for his long-term connection with Ferrari, whom he joined as Carlo Chiti's assistant in 1959. Produced the cars that took 55 victories in a 20-year period spanning World Championships from Surtees to Scheckter, his final season in control coming in 1984. Now with Lamborghini, producing the V12 engine that powered the 1989 Larrousse team and is now also used by Lotus.

FRERE, Paul: Belgian driver, born 1917. GP debut Belgium 1952 (HWM); contested 11 races 1952-56, also in Gordini and Ferrari cars. Best result: 2nd, Belgium 1956 (Ferrari).

FUJI: Japanese international speedway used as venue for the Japanese GP in 1976 and 1977. In 1976 it staged the finale of the Hunt-Lauda World Championship battle, the recently returned Lauda withdrawing on grounds of safety after two laps of a rain-soaked race, Hunt finishing 3rd behind winner Mario Andretti to clinch the title. Hunt (McLaren) returned to win in 1977.



Fittipaldi wins the 1973 British GP in his Lotus 72D

Fangio's battle-scarred Maserati wins the 1957 French GP



A B C D E **F** G H I J K L M

N O P Q R S T U V W X Y Z



The Last Word



Until now I have never considered F1 drivers to be well-read intellectuals. When waiting outside the Honda pit to talk to chief engineer Osamu Goto no driver has ever laughed at my explanation that I was "Waiting for Goto", nor have they chuckled when apprehending me outside the Longines Timing bus at my explanation that I was "A La Recherche Du Temps Perdu". But I must now revise my opinion as they have all obviously read "Man and Superman" by George Bernard Shaw, and I quote - "The universal regard for money is the one hopeful fact in our civilization, the one sound spot in our social conscience. Money is the most important thing in the world. It represents health, strength, honour, generosity and beauty as conspicuously as the want of it represents illness, weakness, disgrace, meanness and ugliness."

Yes folks—it's F1 contract renewal time and as Spitfires flew over the British GP crowd on the 50th anniversary of the Battle of Britain I thought that if Winston Churchill were a Team Manager today he would have modified his famous quotation, for indeed "Never has so much been given to so few for so little." Don't get me wrong, I have no objection to dosh, wonga, a large wad, etc. and if one driver feels that he does his job better than another he will obviously expect to be rewarded accordingly. What I would question is the method and reason behind these mega-buck salaries. Once you are paid in millions it is obvious that what motivates a driver is no longer the spending power of his fee (after all how many Lear jets can you fly at the same time?) but simply his position in the Lolly League compared to his rivals. Maybe, cocooned in his helicopter ride from track to hotel the driver can forget the Sao Paulo slums and ignore the beggars in the streets of Mexico City, but at ground level the world looks different and \$10 million per annum (\$27,400 per day) begins to look like an obscene reward for 16 races per year.

Of course the drivers are not the villains of the piece as team managers are happy to

pay these huge fees if sponsors will foot the bill, and footing it like millipedes on acid are the tobacco companies in their last dying years of permission to sponsor sport. Unlike boxing where a fighter's purse is directly linked to revenue generated by a fight or in business where salaries have some tenuous link with a company's profitability, driver fees are totally arbitrary and one day the goose laying these golden eggs will get a sore bottom from the size of its task and cry enough. At this cry those team managers who are card-carrying members of the RSPCA will draw up the soon-to-be-famous Goose Bottom Agreement, regulate driver fees, and throw in a bonus scheme dependent on race results. The one problem with this state of Utopia is that I have a sneaking suspicion that when we get to Utopia we will find that it is run by a Dictator.

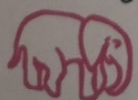
With the latest Middle East crisis brewing there was a sense of adventure in the departure lounge at London Airport as we set off for Hungary. Fleet Street's finest stared at the typewriters with "The day war broke out I was in Budapest..." waiting hopefully at the top of the page. Cries of "How do you spell Gotcha" echoed around the Executive Lounge, while others practised their best to-camera voices, "This is Joe Bloggs, News at Ten, Hungaroring, behind the Iron Curtain". On race day there was some anxiety in the press office as to how we would spot the difference between the official pre-race air display and a potential Iraqi attack.

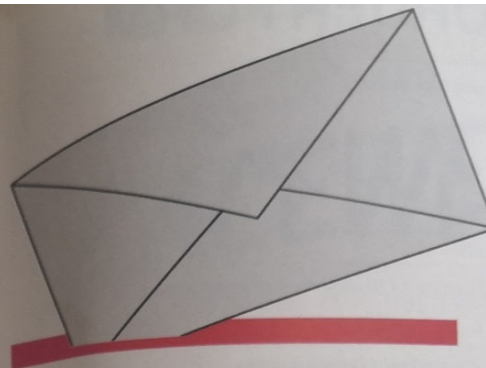
Attention to detail is part of the McLaren team's secret of success, to the extent that Job 1 on arrival at any track is to paint the garage floor in McLaren grey. During Friday's practice I thought that this obsession with cleanliness had gone too far when I spotted a team of Hungarian Mrs. Mopps sweeping the floor. The truth was that the waste pipe to the nearby toilets had overflowed, turning the pit into the Woking Water Closet. For once the team were not flushed with success. A less re-

fined scribe than myself would probably say that here was proof that the once invincible team was now in the S**t.

RJ Reynolds, or Camel or "the other ciggy company" as they are referred to in the paddock chose Hungary to announce their sponsorship of the Benetton and Williams teams starting next year. Moving the Goodyear fitters to one side the press conference was held in the unlikely setting of the tyre fitting area. "Spared no expense with the set", an amused Ron Dennis was heard to say as he headed for the air-conditioned splendour of the TAG McLaren bus. As the conference got under way the world's press were told that it would be conducted mainly in English but that interpreters were on hand and press releases would be distributed in English, Hungarian, German, French and Italian. Unfortunately we were told this in English, Hungarian, German, French and Italian, so that by the time this announcement was over there was very little time for any news or questions. Oh, I nearly forgot; Camel announced that they would no longer support Team Lotus in 1991. You remember Lotus? You know - Colin Chapman, Jim Clark, World Championships? No? Well, look it up in the history books.

For once "The Last Word" has a bottom line. Williams PR person Ann Bradshaw, petrol stations and dogs have all featured in previous columns and with a symmetry that is truly stranger than fiction all three came together in Hungary when poor Ann was attacked by an undernourished alsatian while trying to pay for petrol at a filling station, receiving a severe bite on what an F1 engineer would describe as her underbody.

Jumbo

JUMBO



Letters to the Editor

I refer to the article "100-24-36: Are Senna's the Best Statistics Around?" in PE August 1990. I must raise the strongest objection to the way the author arrives at his conclusion that Senna is almost the best in history. To use the absolute number of points, wins and pole positions to compare past and present drivers is the same as saying such-and-such a golfer is the greatest because of his total earnings.

The scientific way to judge this issue is the performance per GP, the performance index being calculated by dividing an individual's performance by the highest score in each category. For example, Fangio had 24 wins in 51 Grands Prix: in those terms, Ascari's performance is 87% of Fangio's, Clark's 74% and so on.

Fangio is way ahead in all aspects - points per GP, wins and even poles (28 from 51). Senna's ability to take pole position does not lead to wins in the same ratio as other chargers like Fangio, Ascari, Clark and Moss: his performance does not rate him in the same grouping as these immortals.

My conclusion is that Senna is very far from being the greatest at this stage of his career. The king will always be Fangio. Before any of Senna's fans start to shout "Foul", I would add the time-honoured and shop-soiled argument that it is almost impossible to compare the performances of sportsmen of different eras: what I did was look at the figures dispassionately and on a rational basis.

W C Fok
Singapore

After watching this year's Hungarian GP I am again disgusted by the behaviour of the two McLaren drivers, Ayrton Senna and Gerhard Berger. In two separate incidents they ruined

the chances of two drivers in contention, Alessandro Nannini and Nigel Mansell.

As I watched my thoughts went back to the two incidents this season between Mansell and Berger at San Marino and Mexico, and to last season's Senna-Prost incident at Suzuka. Races at this level should not be won by taking your opponent out by force; this from any professional driver is contemptible. Some system whereby "fouls" can be incurred for dangerous driving is long overdue.

This kind of incident, whoever causes it, spoils the enjoyment of the race for the viewer or spectator and does F1's image as a spectacular family spectator sport, which of late has been undermined by politics and erratic judgements from FISA, no good at all.

L M Evans (Ms)
Watford,
Herts

Mario Andretti's comments about F1-CART racing (PE August 1990) were absolutely correct. About the only real differences from a fan's viewpoint between the two are these:

1. Formula 1 goes to more countries
2. Formula 1 ticket prices are nothing less than legalized extortion
3. Formula 1 drivers tend to behave like arrogant prima donnas

In the two years since I started following CART I've also seen more up-front racing than in the last 10 years of F1.

If Bernie is serious about F1 in the US he will find a real circuit to race on instead of these pathetic "Mickey Mouse" street races at places like Las Vegas and Phoenix. I've seen F1 at Detroit and Long Beach and I prefer Watkins Glen.

Prix Editions welcomes correspondence from readers on topics of Formula One interest. Letters may be reproduced in whole or in part; their appearance does not imply agreement with the views expressed.

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After 27 years, about the only reason I still follow F1 is loyalty to Team Lotus. If Lotus quits or comes to race in America then Formula 1 is history for me. There is just too much racing going on in America to waste a lot of money going to see a Lotus-less F1.

Michael E Owens
Austin
Texas

One aspect of F1 which I haven't yet seen covered and one which concerns me greatly is the future of F1.

I refer not only to the recent beginnings of yet another oil crisis, but also to the increasing awareness and concern about the environment. Could this not affect, at the very least, Grand Prix racing as we know it today; and at worst lead to a complete ban on all such motor sport?

What are the alternatives??

R M Carlisle
Derry
Northern Ireland

Watch for a major feature on fuel as a burning F1 issue in a forthcoming number of PE, Mr Carlisle. We share your concern.

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